N.12/696/Rev.1

ECONOMIC SURVEY OF LATIN AMERICA 1963

- The Economic Development of Latin America in Recent Years
- Sectoral Evolution
- Commodity Trade and the Balance of Payments
- The Cuban Economy

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Department of Economic and Social Affairs

Economic Commission for Latin America

ECONOMIC SURVEY OF LATIN AMERICA

1963

UNITED NATIONS
New York, 1965

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E/CN.12/696/Rev.1

UNITED NATIONS PUBLICATION

Sales No.: 65. II.G. 1

Price: $U.S. 3.00
(or equivalent in other currencies)

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EXPLANATION OF SYMBOLS

The following symbols have been used throughout this *Survey*:

Three dots (...) indicate that data are not available or are not separately reported.

A dash (—) indicates that the amount is nil or negligible.

A minus sign (—) indicates a deficit or decrease.

A full stop (.) is used to indicate decimals.

A space ( ) is used to distinguish thousands and millions (3 421 520).

A slash (/) indicates a crop year or fiscal year, e.g., 1954/55.

An asterisk (*) is used to indicate figures partially or wholly estimated.

Use of a hyphen (-) between dates representing years, e.g., 1950–54, normally signifies an annual average for the calendar years involved, including the beginning and end years. "To" between the years indicates the full period, e.g., 1950 to 1954 means 1950 to 1954, inclusive.

References to "tons" indicate metric tons, and to "dollars" United States dollars, unless otherwise stated.

The term "billion" signifies a thousand million.

Details and percentages in tables do not necessarily add to totals, because of rounding.

INTRODUCTION

With the present document, the Economic Commison for Latin America resumes publication of the conomic Survey which it issued periodically from 948, when the Commission was founded, up to 1960.[1]

In the short time that has elapsed since the present ecade began, significant events in the sphere of world conomic policy have given a new cast to the efforts iade in our continent to accelerate economic and social evelopment. The events in question reflect a growing ealization, in the international community and among ectors of opinion in all the individual countries, that nder-development is the biggest of the problems with hich the present generation is confronted, and that a olution for it not only can but must be found if world eace is to be preserved and a minimum of tolerable ving conditions established for the greater part of the uman race.

It has fallen to the United Nations to become the itellectual centre and the material organizer of this new rusade, which has no precedent in history. The General ssembly, by its unanimous decision to designate the urrent ten years "The Development Decade", transormed what had previously been no more than an lealistic aspiration into an international responsibility, nd pledged all countries, rich and poor, old and new like, to redouble their efforts and unite their activities i a decisive campaign against poverty, ignorance and iequality of opportunities. The Conference on the pplication of Science and Technology and the Confernce on Trade and Development convened within the ist two years have been undertakings designed to remedy r remove—by means of practical achievements and o-ordinated action at the world level—the scientific nd technical shortcomings of the less advanced countries nd the obstacles to economic development deriving from ie present situation of the countries exporting primary ommodities. On a smaller scale, but no less effectively, ie daily work of the various dependencies of the United lations and of its specialized agencies is being intensified nd expanded in co-operation with the efforts put forth y all the developing countries.

This world-wide climate of opinion has coincided in atin America with the crystallization and consolidation f a set of basic concepts which mark an epoch in the rocess of interpreting development problems and defining a policy that may prove valid for the whole continent. he following are the most important of these concepts:) development is an economic and social problem in ie broadest sense of the words, and situations hitherto egarded as belonging to one or the other category canot be dealt with separately; (*b*) the solution of this roblem calls for a planned policy of integrated and fficient action within the shortest possible space of time;) such a policy implies the introduction of institutional reforms in respect of economic and social organization (for example, agrarian reform, the remodelling of tax systems, the improvement of income distribution, effective access to education and equality of opportunities for all), and these measures entail action that is not confined to the manipulation of the traditional instruments of economic policy; (*d*) the serious obstacles to the acceleration of the development process encountered at the national level can be bypassed through the progressive integration of the Latin American economy; and (*e*) it is essential to build up a trade structure and to secure terms of trade with the rest of the world that will place international commerce among the dynamic factors making for development.

The evolution of these ideas is manifested in the realm of theoretical and technical speculation as well as in institutional achievements and practical decisions.

The aim of theoretical research is to formulate a consistent interpretation of the relations between the various elements of the economic and social system—or, in other words, between economic conditions, social phenomena and the institutional and juridical organization of society—with the ultimate purpose of determining the factors that promote social progress and those that limit it. In the more concrete sphere, the end pursued by analysis and technique is the expression of social welfare objectives in terms of quantitative targets, and planning methods are studied and improved upon as means of reaching practical decisions in relation not only to economic affairs but also to education, health, housing and the whole broad field that is commonly included under the generic head of human factors or resources.

With regard to practical achievements, the most striking and hopeful manifestation of this new attitude on the part of Latin America is to be found in the position adopted by the majority of Governments, and in the increasing readiness of public opinion to accept planning systems as instruments for the rationalization of governmental decisions. The plans concerned, as a general rule, consider such social questions as education, health and housing in conjunction with those of an economic nature, and, in many instances, make provision for a reorganization of public administration and the organs of government with a view to greater efficiency. Similarly, a number of countries have launched agrarian and tax reforms, or are planning to do so, although differences both of kind and of degree are observable in the execution of such projects.

Obviously, planning is in its initial stage in Latin America. It therefore betrays the imperfections inherent in all new undertakings, and is adversely affected by the shortage of properly qualified personnel and the lack of experience in so complex a field. The basic concept of planning as a continuous and maturing process has not yet been absorbed by all responsible sectors, and it not infrequently happens that the rationality at which programming aims is countered by the circumstantial decisions that have been the rule in traditional Latin

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[1] During the past three years, ECLA has not been publishing is study, but has confined itself to collaborating in the preparation the Survey drafted by the Organization of American States.

American policy or by a lack of unanimity in the highest government circles.

As far as economic and social reforms are concerned, it would be ingenuous to suppose that they can be carried out in our continent without arousing the opposition habitually met with in all parts of the world from the sectors affected by such changes, or without the necessity of facing the difficulties, and even temporary anomalies, that any radical reform of economic structures brings in its train. The resistance put up by groups of interests has been and will continue to be manifested in our countries in open and systematic opposition to reforms, or, more commonly, in pressure both inside and outside official circles, exerted by means of political, economic and financial expedients, to reduce the reforms in question to weak and inoffensive instruments that will vitiate and even discredit the objectives pursued. Fortunately, many of our countries have also seen the emergence of significant groups of entrepreneurs and leaders of opinion who have shown themselves capable of understanding and furthering the structural reforms that economic development and the improvement of social conditions demand.

During the past three years, efforts to promote the economic integration of Latin America have found concrete expression in institutions and practical achievements of special significance.

The economic co-operation movement initiated by the Central American countries in 1951 became, by the end of the last decade and particularly from 1960 onwards, a definitive advance towards a common market, with tangible results in respect of the expansion of intra-area trade, the formulation of uniform policies in various fields, and the creation of economic and financial institutions for the purpose of expediting integration and development. The case of Central America increasingly exemplifies what can be done in the economic field through co-ordinated action on the part of small political units whose possibilities of developing in isolation are slight.

More ambitious and more difficult, as well as of more recent inception, is the enterprise represented by the integration of the Latin American countries as a whole. Nevertheless, a first step has been taken, in the shape of the Montevideo Treaty of 1960, whereby Argentina, Brazil, Chile, Mexico, Paraguay, Peru and Uruguay set up the Latin American Free-Trade Association (ALALC), which was subsequently joined by Colombia and Ecuador. The fact that the toilsome negotiations which preceded the agreement did not immediately lead to the creation of a Latin American common market, and that their scope was restricted to the formation of a free-trade area, indicates the complexity of the problem of Latin American integration and the economic, political and technical difficulties in the way. Even so, despite the limitations of the system adopted, significant progress has been made within ALALC towards the liberalization and expansion of intra-regional trade. Still more important, however, is the experience which is gradually being accumulated, and from which lessons can be drawn that may shorten the road to integration. The organs of the Association, the Latin American economic institutions and the Governments of the region themselves are engaged upon an intensive evaluation of the methods hitherto employed and the results achieved, with a view to devising formulas whereby stagnation can be avoided and the adoption of more vigorous and resolute measures will be implied. The conviction exists that a top-level policy decision is material to the success of Latin American integration, and the studies and analyses that are under way will undoubtedly provide the background data required for action of such supreme importance.

In the same context of co-ordinated action on the part of the Latin American countries, mention must be made of the concerted position taken up by the Governments in respect of international trade policy on the occasion of the United Nations Conference on Trade and Development. At the Meeting of Latin American Government Experts on Trade Policy held at Brasilia in January 1964, and at the subsequent Conference at Alta Gracia (Argentina) in February and March, which paved the way for the Geneva meeting, the discussion was not confined to generalizations, and Latin America's specific aspirations in the field of international economic policy were established by common accord. Whatever the outcome of the proceedings of the Conference on Trade and Development, there can be no doubt that the resolutions adopted at Brasilia and Alta Gracia constitute guiding principles for the Latin American countries' trade policy vis-à-vis the other regions of the world, especially the industrialized countries.

Active concern for the creation of conditions favourable to development has not been displayed in the Latin American countries alone. The present decade has witnessed the strengthening, through the inter-American agencies, of the pertinent instruments of co-operation with the industrial country that maintains the closest economic relations with Latin America—the United States.

The establishment of the Inter-American Development Bank (IDB)—a long-standing aspiration that met with no sympathy until a few years ago—became possible in 1959, and it has served as an efficacious instrument for the financing of economic and social projects and the channelling of capital resources from developed countries towards Latin America. Here too the non-material effects that cannot be assessed in quantitative terms assume particular importance. The existence and the efficacy of IDB have created a psychological climate of greater confidence in the region's own institutions and have encouraged positive government action and the spirit of enterprise in our countries.

In the sphere of continental co-operation the change in the United States' economic and social policy vis-à-vis Latin America, symbolized by the Alliance for Progress, has unquestionably been of radical importance. At the meeting held at Punta del Este in August 1961, the Latin American countries agreed upon the need to establish economic and social development targets, to carry out structural reforms and seek to improve income distribution, to accept planning as the most appropriate instrument for the promotion of development and to support economic integration. The Government of the United States formally undertook to collaborate in the financing of investment. Although under the programme of the Alliance important steps have unquestionably been taken to rationalize and intensify efforts on behalf of increased economic and social progress, and both by the United States Government and by the international financing agencies resources have been made available on a larger scale than in previous years, it is equally undeniable that results so far have fallen short of the targets established and the hopes that were placed in the programme at the outset. Various factors have contributed to this situation. Foreign trade earnings, despite an improvement, have not reached a level high enough to speed up the rate of development, which in many countries has been even lower than in 1955–60, a rather unfavourable period. In countries as important as Argentina, Brazil and Uruguay, the economic situation has undergone in recent years a deterioration that has been reflected in a decrease in the product in Argentina and Uruguay and a substantial drop in the rate of development in Brazil. Numerous political and administrative vicissitudes, as well as opposition from certain interests, both in the United States and in Latin America, have prevented the programme from acquiring the consistency and securing the support needed for an undertaking of such far-reaching scope as the Alliance. In recent months, a move to overcome many of these difficulties has been initiated with the constitution of the Inter-American Committee of the Alliance for Progress.

It is the discrepancy between, on the one hand, the objectives pursued and the efforts of the new institutions to create better conditions for more rapid development, and, on the other, the scantiness of the practical results achieved, that at the present time raises the prime question with which Latin America is faced.

The answer is not easy to discover. The Survey presented here endeavours to make a contribution to the search through the analysis of the chief economic variables. But, important as these are, it cannot be alleged that they are the only factors to be considered. In the existing Latin American complex, the phenomena described by the vague generic name of social problems, as well as political situations and conflicts, are of vital significance. Furthermore—and this is a highly important point—to speak of Latin America as a whole is an inevitable generalization in dealing with an area throughout which many common features are to be found, but it involves the risk of overlooking the economic, social and political differences between the various component countries. With these reservations, it will perhaps do no harm to sum up and simplify a few of the enlightening points that seem to emerge from economic analysis.

The first to catch the eye is the close relationship existing between the foreign trade situation and internal growth. Broadly speaking, the periods in which the gross product shows the biggest increase correspond to those in which export earnings expand. The causal relationship underlying this phenomenon is readily explicable, and has been stated on various occasions. Our export economies have not yet succeeded, even in the countries where a higher degree of material progress has been registered, in creating internal dynamic elements capable of efficaciously counteracting the ill effects of a downward movement in their foreign trade when these attain a certain magnitude. And once compensatory measures overstep the limit compatible with the strength of the national economy, constituents of disequilibrium are infallibly generated, which, if they persist and are intensified, lead to inflation and its disastrous consequences. Hence the need, not to dispense with short-term remedies, but to go farther, and strike at the root causes of the trouble, namely, the instability and deterioration of the region's export trade and the structural deficiencies that aggravate internal weakness.

The improvement of its foreign trade situation does not depend upon Latin America alone. It is true that the introduction of greater flexibility and diversification in the region's export lines, and a steady endeavour to raise productivity in the activities concerned, are both necessary and feasible. To cite only one example (which is, however, highly significant because of the limited economic dimensions of the countries involved), reference to the Central American countries will suffice to give the reader an idea of the action taken in this direction and the favourable results obtained. But the deterioration of Latin America's foreign trade cannot be imputed wholly to lack of effort. In the relevant chapters of the present report it can be seen how the volume of exports has steadily increased, and how, nevertheless, their purchasing power has decreased in relative terms, as a result of the decline of the terms of trade. Hence the urgent need to improve the situation as regards prices of primary commodities and to create favourable conditions for the access of the developing countries' traditional exports and new industrial products to the world market. The procedures and policies currently applied in economic relations between the industrialized countries and the primary exporter economies are inadequate to solve the problem of under-development. Even the granting of credits, on the terms usual at present, barely represents a temporary makeshift. The borrowing capacity of the Latin American countries, for example, is dwindling perilously; in 1963 financial services amounted to about 26.6 per cent of their current foreign exchange income, and in some countries it seems that a very ample funding of the existing debt will be inevitable.

It would be hazardous, to say the least, to rely upon spontaneous market forces to provide a way out simply because last year price increases were registered for some primary products. Apart from the fact that the circumstances operating in the case of each commodity may change, and alter the existing position, it must not be forgotten that the deterioration in the terms of trade is due not only to the fall in export prices but also to an opposite trend in the case of imports. Consequently, the rise in the prices of many of Latin America's primary exports has barely sufficed to offset the upward movement of import prices, and the external terms-of-trade index was even lower in 1963—by about 8 per cent—than in 1958, a year of depressed price levels, and in the majority of countries, was lower than in 1960 as well.

Thus, there is good reason for the hopes and interest aroused in the developing areas by the World Trade Conference, and all the more in the case of Latin America, on account of the exceptional sharpness of the drop in its terms of trade. The struggle to secure a more equitable market and price structure forms an essential part of the campaign against under-development, and there can be no doubt that international relations will henceforward be increasingly influenced by this fact.

While it is true that a favourable foreign trade situation is an essential requisite for economic progress, it is no less certain that the Latin American countries can and must intensify their own efforts to remedy the internal factors which weaken or nullify any development policy. The range of these negative factors is very wide, and varies according to the conditions prevailing in each economy. But it is possible, even at the risk of harping on familiar strings, to pick out a few that are of major importance and are found in all or almost all the countries of the region.

It is now generally admitted that income distribution in the Latin American countries is an obstacle to the establishment of a better-balanced society and to healthy economic growth. The over-all figures for *per capita* income mask the real state of affairs in sectors constituting the bulk of the population, whose living conditions scarcely attain a wretched subsistence level, in contrast with the luxury consumption of a few groups. From the strictly economic standpoint, the stagnation observable in specific sectors of production, especially agriculture, the lack of dynamism that prevents the improvement of productivity in some activities, and the want of entrepreneurial spirit are in no small measure imputable to an unsatisfactory income distribution which, on the one side, is reflected in excessively high income levels, and, on the other, breeds a sense of frustration or sets up barriers to social mobility. And, in addition, there is the well-known fact that a population with a low income level implies an unreliable market which makes steady economic growth an impossibility. Of course, a satisfactory income distribution policy requires adaptation in each individual case to the situation of the country concerned. During a period of economic growth, measures relating to taxation, reforms of the land tenure system, wage increases and the like will be easier to introduce and will encounter less opposition, and more resources will be available to cover the investment and expenditure they entail. But even in countries where stagnation prevails, it may happen that these very reforms are the only means of dispelling the existing inertia and stimulating creative forces. Nor should it be forgotten that one of the desiderata of economic policy is to strike a balance between social and economic reform of a distributional nature, and adequate encouragement to private investment. It will sometimes be necessary to accept the fact that this balance cannot be achieved over the very short term, but the experience of many countries shows that even in such cases, given a satisfactory policy, the reforms themselves soon create incentives to productive investment. Be this as it may, what must be emphasized over and over again is that the countries of Latin America cannot shirk this vital problem of income distribution in their development policies.

Primary importance also attaches to a set of factors that sometimes go beyond the province of economic policy, and that might be grouped under the head of "social confidence". Insecurity in any shape or form is development's worst enemy. It may derive from frequent political changes, and the pernicious effect produced by this type of instability on the Latin American economies is all too well known. It may also arise out of the inability of Governments to lay down and maintain lines of conduct which will guarantee the factors of production a minimum of safeguards for their present situation or their future plans. Similarly, in a more strictly economic domain, the mismanagement of fiscal and monetary policy and the persistence of defective administration are states of affairs which undermine confidence, discourage investment and distort the economic outlook of the community. Hence it is that the importance of the incipient movement towards planning in Latin America transcends the mere rationalization of economic decisions. In so far as plans are consolidated in the form of government programmes they will do more than any other instrument to establish systematic and consistent policies whereby the factors making for insecurity can be reduced to a minimum.

The general propositions set forth in this Introduction spring from the analyses developed in the chapters of the present Economic Survey, but they are in no wise exhaustive. In each of the fields covered, with reference to the development of both the over-all economy and the individual sectors of production, as well as to measures of economic policy, data are supplied which may, it is hoped, make some contribution to a better understanding of Latin America's situation, and to the lessons that may be drawn from experience as a guide to future action.

Part One

THE ECONOMIC DEVELOPMENT OF LATIN AMERICA IN RECENT YEARS

Chapter I

THE ECONOMIC DEVELOPMENT OF LATIN AMERICA DURING THE PERIOD 1960–63[1]

A. THE SLOW RATE OF ECONOMIC GROWTH

1. The product and income

In the early years of the sixties Latin America's rate of economic growth again showed signs of marked nstability. Moreover, if the region is considered as a whole, the statistical estimates of the product and real ncome indicate that the tendency of economic development to slacken in pace which has been discernible since the middle of the fifties is still persisting.

But the economic processes and movements underying these statistical estimates for the region as a whole vary in kind and degree from one country or group of countries to another, so that a more accurate description and interpretation of Latin America's economic development, especially over the short term, calls for analytical nvestigation of what has been taking place in individual countries and different geographical areas in the region. Hence it is that although the aim of the present chapter s merely to give a general impression of Latin America's rate of economic growth and of the most important of the factors by which it has been determined, attention must often be drawn, in the discussion of the various aspects of the economic process, to the particular situation or trends observable in one or other of the countries or groups of countries concerned.

During the second half of the fifties, real *per capita* ncome in the region as a whole rose by 1.4 per cent yearly, which was appreciably less than in the first half of the decade (1.9 per cent). The decline became more pronounced around 1957–59, with the result that *per capita* income tended to remain stationary or to fall in the majority of Latin American countries. Brazil was an exception to the rule, since it continued to develop at a relatively rapid pace.

From 1959 onwards, these trends were substantially modified, the rate of economic growth accelerated, and *per capita* income rose by 2.9 per cent in 1960 and by 2.6 per cent in 1961 (see table 1), acquiring an impetus greater to that of the early fifties. This recovery was short-lived, however, for in 1962 *per capita* income again came to a standstill, and in 1963 tended to fall.

Two interrelated factors determined these trends: the fluctuations in domestic production and the deterioration in the external terms of trade. Domestic production of goods and services expanded during the period 1959–61 at a rate of 2.5 per cent *per capita*, to judge by the variations in the domestic product, but in 1962 its rate of growth became much slower and in 1963 tended to fall in absolute terms. At the same time the external terms of trade continued to deteriorate; this affected the purchasing power of exports, and thus kept real income slightly below the level of the domestic product. As a result, its rate of growth is less than that recorded for the product and its periodic declines are even more pronounced. Only in 1961 and 1963 did the indexes of the terms of trade show some stability or improvement in comparison with their evolution in the previous year, and this helped to bring about a slight improvement in the growth rate of real income, or at least to prevent an acceleration of the decline that took place in real income in 1963 as a result of the contraction in the *per capita* domestic product.

However, these movements have been sporadic and of little significance, for even in the short span of the last five years the external terms of trade fell by 8 per cent, to judge from a comparison of the 1963 and 1958 indexes.

The weakening of Latin America's rate of growth in 1962–63 was due, first and foremost, to the economic recession in Argentina and the sharp reduction in the growth rate of Brazilian production in 1963. In addition, the total figures were affected, albeit to a lesser degree, by a production decline in Uruguay. The growth rates in Chile, Colombia, Peru and Venezuela also slowed down, although, with the exception of Chile, much less markedly than in Brazil. On the other hand, in Ecuador, in the countries forming part of the integrated Central American area and in Mexico, the product and income have latterly tended to expand more rapidly than in the years immediately preceding the period in question.

This broad outline of the recent evolution of the economy in each of these countries shows that economic growth took a number of different courses depending on the country or group of countries concerned. These disparities in trend are apparent even if the analysis is confined to the group of Latin American countries that excludes Argentina and Brazil, since the recession in Argentina and the slackening of the growth rate in Brazil weigh heavily in the aggregate figures for Latin America, in view of the fact that the product and population of the two countries together account for over 45 per cent of the total.

For the purposes of this analysis, table 1 presents product and income series for two groups of countries: one comprising all Latin American countries except Argentina and Cuba, and the other excluding Argentina, Brazil and Cuba (see also figure I).

The product and income series for Latin America excluding Argentina and Cuba show that this group of

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[1] The analysis made in chapters I and II does not include data on Cuba because full information on this country is not obtainable. The same applies to the tables and figures in the chapters concerned. Moreover, the product and income series cannot be brought into line with those of the other Latin American countries owing to the differences in the concepts by which they are governed.

Table 1. Latin America: Evolution of the gross product and real income

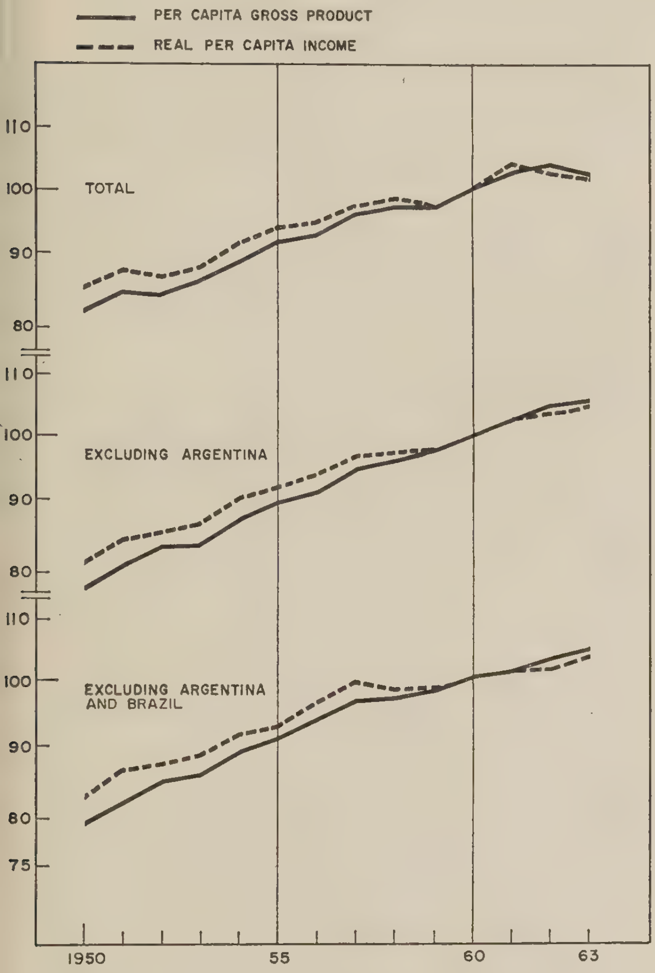
Year or period	*Latin America, excluding Cuba*					*Latin America, excluding Argentina and Cuba*					*Latin America, excluding Argentina, Brazil and Cuba*				
	Gross product	*Real income*	*Population (millions)*	*Gross product*	*Real income*	*Gross product*	*Real income*	*Population (millions)*	*Gross product*	*Real income*	*Gross product*	*Real income*	*Population (millions)*	*Gross product*	*Real income*
	Millions of 1960 dollars			Per capita *in 1960 dollars*		*Millions of 1960 dollars*			Per capita *in 1960 dollars*		*Millions of 1960 dollars*			Per capita *in 1960 dollars*	
1950	48,254	49,661	150.6	320	330	35,936	37,141	133.4	269	278	22,987	23,855	81.3	283	293
1955	61,688	62,711	172.8	357	363	47,284	48,368	153.6	308	315	30,204	31,114	93.2	324	337
1956	63,980	64,833	177.7	360	365	49,248	50,527	158.2	311	319	31,866	32,698	95.9	332	341
1957	68,102	68,977	182.9	372	377	52,664	53,695	163.0	323	329	34,089	34,899	98.8	345	353
1958	71,141	71,485	188.2	378	380	54,881	55,399	167.9	327	330	35,077	35,415	101.7	345	348
1959	73,248	73,176	193.6	378	378	57,744	57,747	173.0	334	334	36,481	36,489	104.8	348	348
1960	77,488	77,488	199.1	389	389	61,064	61,064	178.2	343	343	38,444	38,444	107.9	356	356
1961	81,610	81,678	204.9	398	399	64,217	64,258	183.5	350	350	39,867	39,939	111.1	359	359
1962	84,458	83,980	210.7	401	399	67,640	67,285	189.0	358	356	42,020	41,779	114.5	367	365
1963[a]	86,150	85,852	216.8	397	396	70,120	69,835	194.7	360	359	43,960	43,834	117.9	373	372
Annual cumulative rate of growth															
1950–55	5.0	4.8	2.8	2.2	1.9	5.6	5.4	2.9	2.7	2.5	5.6	5.5	2.8	2.8	2.8
1955–60	4.7	4.3	2.9	1.7	1.4	5.2	4.8	3.0	2.2	1.7	4.8	4.3	2.9	1.9	1.1
1960–63[a]	3.6	3.5	2.9	0.7	0.6	4.7	4.6	3.0	1.6	1.6	4.6	4.5	3.0	1.6	1.5
1960–61	5.3	5.4	2.8	2.3	2.6	5.2	5.2	3.0	2.0	2.0	3.7	3.9	3.0	0.8	0.8
1961–62	3.5	2.8	2.8	0.8	—	5.3	4.7	3.0	2.3	1.7	5.4	4.6	3.0	2.2	1.6
1962–63[a]	2.0	2.2	2.9	−1.0	−0.8	3.7	3.8	3.0	0.6	0.8	4.6	4.9	3.0	1.6	1.9

SOURCE: ECLA, on the basis of official statistics.

[a] Provisional figures.

countries, besides having a higher growth rate than that of Argentina in the period under analysis, maintained the rate obtaining in the second half of the fifties up to 1962. The over-all domestic product of this group of countries increased by 5.2 per cent in 1961 and by 5.3 per cent in 1962, although the deterioration in the external terms of trade reduced the increase in real income to 4.7 per cent in the latter year. However, in 1963, the growth rate of both the over-all product and income diminished to 3.7 per cent. Several countries have contributed to this trend, but the main responsibility lies with Brazil.

Figure I. Latin America: Indexes of *per capita* gross product and real income, 1950–63
(Index: 1960=100)
Semi-logarithmic scale

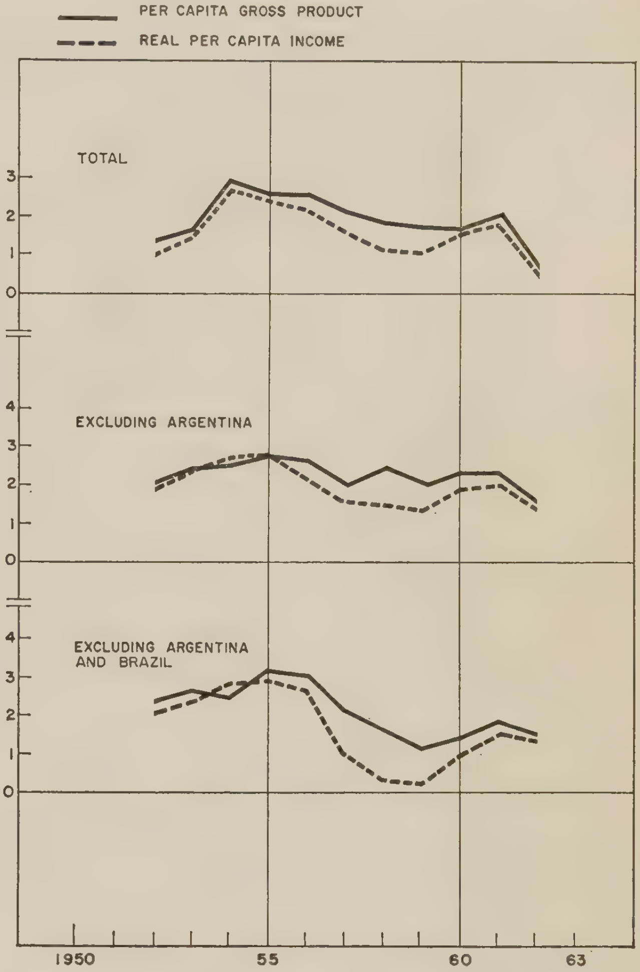


Source: ECLA, on the basis of official statistics.

To pass on to the other group of countries, i.e., that which excludes both Argentina and Brazil, it will be seen that the growth rate did not suffer as marked a decline as that of the first group in 1963; on the contrary, it was higher than in the immediately preceding years. Thus, total real income climbed in 1963 by 4.9 per cent, whereas its rate of increase during the second half of the fifties was 4.3 per cent.

But, despite the more lively pace of economic growth revealed by the figures for the majority of countries, sluggish development continued to be the pre-eminent characteristic of the region's economy, since, even in the group of countries that enjoyed a higher growth rate during the last two years, the annual *per capita* rate of increase for the product and real income failed to average 2 per cent between 1960 and 1963 (see again table 1).

Figure II. Latin America: Evolution of the growth rate, 1950–63
(Moving three-year averages of annual changes)
Natural scale



Source: ECLA, on the basis of official statistics.

Figure II depicts the slow tempo of development in Latin America at present, and compares it with the evolution of the economy through the fifties. It records the changes in the moving three-year averages for the annual growth rates of the product and income in the region as a whole and in the two groups of countries under consideration. It will be seen that Latin America as a whole speeded up its rate of growth during the first half of the fifties, eventually reaching and maintaining over a relatively long space of time an annual rate of close to 3 per cent for the *per capita* domestic product; this subsequently declined uninterruptedly until it touched 1.5 per cent in 1959–60, rose for a short time and then fell sharply again.

If Argentina is excluded from the analysis, the domestic product of the other Latin American countries also manifested a declining rate of growth during the second half of the fifties, but subsequently attained a modicum of stability, the *per capita* rate being 2 per cent annually. However, this tempo was not maintained in 1963 owing to slower growth in several countries, and more especially in Brazil.

The growth rate of the group of Latin American countries that do not include Argentina and Brazil showed greater fluctuations, which were particularly marked for *per capita* income owing to the severe deterioration in the group's external terms of trade. The annual *per capita* growth rate in recent years, which was 1.5 per cent for the product and 1 per cent for income (three-year averages), was more stable, but followed upon a period of marked decline, which began at a level of over 3 per cent in the early years of the fifties.

2. THE ECONOMIC GROWTH OF LATIN AMERICA AS COMPARED WITH THAT OF OTHER AREAS

Latin America has not shared to the same extent as other areas in the expansion of the world economy in recent years, since both its foreign trade and *per capita* product have increased less than in other parts of the world. Thus, the phenomenon of slow development, which, in the context of Latin America's domestic economy, is represented by a weaker rate of growth, by the tremendous disparity between the actual situation and the aspirations that have been translated into policy targets or objectives, and by a lack of economic dynamism and consequent failure to make use of the region's resources, is thrown into even sharper relief if a comparison is made between Latin America and other economic areas, since the gap between average *per capita* income in the former and in the more industrialized countries is then seen to have become even wider.

To a certain extent, the expansion of the world economy tended to be concentrated in the area occupied by the countries with the highest level of income. The dynamic force transmitted by these countries through their foreign trade has had a greater effect on the industrialized countries themselves than on Latin America, where the slow growth of its exports of primary commodities and the deterioration in the terms of trade did much to nullify the stimulating influence which might have been exercised on Latin America's economic development by the increase in exports during the latter part of the fifties.

Between 1950 and 1961 the countries generally considered as being economically developed showed an aggregate economic growth rate of 2.5 per cent yearly, to judge by the index for the *per capita* domestic product. Of this group, the European countries belonging to the Organization for Economic Co-operation and Development (OECD) had an annual growth rate of 3.7 per cent, and those belonging to the European Economic Community (EEC) an even higher rate of 4.6 per cent, while Japan increased its *per capita* domestic product at the rate of 8.3 per cent yearly (see table 2). In Latin America, however, the increase in the *per capita* product was far less, barely reaching 2 per cent during the period in question. The countries with a centrally planned economy also enjoyed higher growth rates than Latin America, according to table 2. It should be pointed out, however, that the figures are not strictly comparable, since the concept of the product in the centrally planned economies excludes a whole range of services which are normally included in free-enterprise economies.

In recent years there has been a falling off in the pace of world economic expansion, both in the industrialized countries and, to an even more marked degree, in the centrally planned economies. Only in the United States was the average growth rate higher after 1960 than in the fifties. The *per capita* product continued to expand more slowly in Latin America than in other areas. In 1960–62, its annual growth rate rose to 2.7 per cent in the developed regions, owing to the incidence of the United States on the total, whereas in Latin America it fell to 1.5 per cent.

In the countries with centrally planned economies, the growth rate decreased to such an extent during the period 1960–62 that, in some, it was only half as much as in the fifties. However, they continued to enjoy a higher growth rate for the *per capita* product than Latin America.

The sluggish nature of Latin America's economic growth which is brought to light by these comparisons would be even more manifest if the analysis were based on indexes of real income from the middle of the fifties onwards. During this period, Latin America's economic growth slackened off, and the deterioration in its external terms of trade had an adverse effect on the growth of the product, while benefiting the economy of the industrialized countries; as a result, the growth of real *per capita* income in Latin America was markedly inferior to that of the domestic product.

This disparity in the growth rates shows that the gap is widening between the level of income in Latin America and in the industrialized countries, and that the differences in social well-being are becoming more pronounced. The average level of income is so low in Latin America (its ratio to average income in the United States can be estimated, for example, as one to seven, and as one to three in relation to Europe) that it would have to rise far more swiftly there than in either of the other two areas before the absolute differences in average *per capita* income could be reduced.

One factor has been of paramount importance in preventing Latin America from keeping up with the economic expansion taking place in other areas. This factor is its rate of population growth, which is one of the highest in the world. Given these conditions, the region's economy would have to expand far more than that of other areas for its labour force to be absorbed into productive activities and for its income to increase sufficiently to make an effective contribution towards lessening the existing disparities.

If the growth rate of the over-all product is examined separately, that is to say, without reference to the increase in population, it will be seen that the rate in Latin America during the fifties was close to, and in some cases higher than, that of other areas where the evolution of average *per capita* income was much more favourable. Thus, in the developed regions as a whole, the growth rate of the gross product during the fifties was ess than 4 per cent annually (3.7 per cent), whereas in Latin America it was nearly 5 per cent. Similar trends re observable in 1960–62, when the rate was 4.4 per ent for Latin America and 4 per cent for the developed reas.

Hence it is the increase in the population of Latin America, and the consequent inability of the labour force to find employment in economic activities making for higher productivity, that is primarily responsible for the differences in the growth rates of the *per capita* product, differences which have, moreover, become more unfavourable to Latin America by reason of the deterioration in the region's terms of trade with the industrialized countries.

Table 2. **Annual growth rates of the total and *per capita* gross product in various regions and countries**

(*Percentage*)

	Total gross product		Per capita *gross product*				
	1950–61[a]	*1960–62*	*1950–61*	*1960–62*	*1960*	*1961*	*1962*
Developing regions							
Latin America[b]	4.9	4.4	2.0	1.5	2.9	2.3	0.7
Developed regions	3.7	4.0	2.5	2.7	2.8	1.7	3.7
Australia	3.9	3.2	1.6	1.1	0.9	−3.2	5.3
Canada	3.7	3.6	1.1	1.7	−0.3	0.1	3.2
United States	3.1	3.9	1.4	2.3	0.9	0.1	4.4
Japan	9.5	9.0	8.3	8.1	12.2	13.1	3.1
New Zealand	3.5	3.2	1.3	0.8	4.6	−0.2	1.8
European countries members of OECD	4.6	4.0	3.7	2.8	5.3	3.2	2.3
Countries of EEC	5.6	5.0	4.6	3.9	6.1	4.0	3.8
Countries with centrally planned economies[c]							
German Democratic Republic	8.8	3.8	9.5	4.2	4.9	4.7	3.6
Bulgaria	9.7	4.0	8.9	3.1	6.0	2.0	4.1
Czechoslovakia	7.7	3.5	6.4	2.7	7.6	5.6	−0.1
Hungary	6.0	5.4	5.3	5.0	9.6	5.4	4.7
Poland	7.7	5.0	5.9	3.9	2.9	6.5	1.3
Romania	10.2	8.6	8.9	7.8	10.0	9.2	6.4
Soviet Union	10.5	4.5	8.9	4.9	6.1	5.3	4.4
Yugoslavia	7.3	4.5	5.9	3.4	5.0	2.9	3.8

SOURCES: United Nations, *World Economic Survey 1961*, New York, 1963, *Yearbook of National Accounts Statistics 1962*, *Statistical Yearbook 1962*, *World Economic Survey 1962*, New York, 1963, and *Monthly Bulletin of Statistics*, April 1964; OECD, *General Statistics Bulletin*, Paris, November 1962, and ECLA estimates based on official statistics.

[a] The figures for the United States, Canada, European countries in the OECD and Latin America refer to the period 1950–61; for the developed regions as a whole and in general for the countries with centrally planned economies they refer to 1950–59; for Japan, they refer to the decade 1950–60, and for Australia and New Zealand to 1950–51/1960–61.

[b] Excluding Cuba.

[c] Net physical product.

The slowness with which Latin America's foreign trade has been expanding is another manifestation of the region's state of economic under-development with respect to the rest of the world. The fact is that the internal economic development enjoyed by other areas or countries, such as Europe and Japan, was accompanied by a no less marked expansion of foreign trade, that was at one and the same time a dynamic factor in and the result of that development. In Latin America, on the other hand, the inadequate development of its exports and their loss of purchasing power severely limited economic development. The figures for world exports by regions (expressed in current dollars) clearly demonstrate the decline in the growth of Latin America's trade and the relatively backward state in which it still remains.

In the first half of the fifties, the dollar value of Latin America's exports increased by nearly 4 per cent each year (see table 3). This rate dropped to slightly over 2 per cent in the second half of the decade, and tended to recover after 1960 when it became approximately 4.2 per cent annually.

The same period saw a more rapid expansion of the exports of the developed countries and of developing areas in Africa and the Middle East. The exports of the developed countries, taken as a whole, rose during the fifties at an annual rate that varied from 10 to 7 per cent, and during recent years remained stable at 6.6 per cent. Meanwhile, the dollar value of African exports, which had been increasing at a slower pace during the second half of the fifties, picked up speed in the last few years achieving a rate of over 5 per cent and, in terms of value, have been outstripping Latin America's exports since the beginning of the fifties. Slower still, in relative terms, is the growth of Latin American exports, when compared with those of the Middle Eastern countries. It is obvious that these trends were influenced by changes in the volume and price of exports. For instance, the sharp fall in the value of Latin American exports during the last few years of the fifties was attributable, to a great extent, to the drop in commodity prices although less so after 1960; on the other hand, the gradual increase in the prices of manufactured products compared with the relative stagnation of commodity prices has been partly responsible for the rise in the relative value of the industrialized countries' exports.

Table 3. Value of world exports: Growth rates by regions and countries[a]

Region or country	*1950–55*	*1955–60*	*1960–63*	*1960–61*	*1961–62*	*1962–63*
North America	8.7	5.4	4.4	2.6	3.0	7.5
United States	8.6	5.8	4.1	2.0	3.3	7.2
Canada	9.0	4.1	5.1	4.6	2.0	8.8
Western Europe	10.8	8.2	7.3	7.1	5.6	9.1
EEC	14.6	10.1	8.1	8.7	5.9	9.8
EFTA	7.3	5.7	6.0	4.9	4.8	8.4
Australia, New Zealand and South Africa	4.4	2.9	7.9	10.0	0.5	13.6
Japan	19.7	15.1	10.4	4.5	16.1	10.9
Total developed regions	*9.9*	*7.3*	*6.6*	*5.7*	*5.1*	*9.0*
Latin America	*3.9*	*1.1*	*4.2*	*2.4*	*3.8*	*6.6*
Africa[b]	8.9	3.3	5.4	3.4	1.8	11.1
Asia[c]	1.3	2.1	3.7	−2.5	1.7	12.3
Middle East	7.2	7.3	7.7	1.7	12.5	7.4
Other regions[d]	9.2	2.3	4.0	8.1	−0.6	4.7
Total developing regions	4.5	3.0	4.6	0.7	4.7	8.7
WORLD TOTAL	8.2	6.1	6.1	4.5	5.0	8.9

SOURCES: International Monetary Fund, *International Financial Statistics*; ECLA, *Economic Bulletin for Latin America*, vol. I, No. 1, Santiago, March 1964.

[a] Excluding European and Asian countries with centrally planned economies.

[b] Excluding countries in the Middle East.

[c] Excluding Japan and countries in the Middle East.

[d] Remaining countries and territories of America and Oceania.

Table 4. Imports from Latin America, by regional groupings and countries

(*Percentage*)

Latin America as supplier	*1955*	*1960*	*1961*	*1962*	*1963*
Of the world	8.6	6.7	6.5	6.5	6.3
Of the United States	31.0	24.4	22.6	21.2	20.5
Of Western Europe	6.1	5.1	4.8	5.0	4.9
Of EEC	6.9	5.7	5.3	5.5	5.5
Of EFTA	5.4	4.8	4.5	4.5	4.3
Of Japan	10.8	6.4	7.1	7.5	7.2
Of all developed regions	10.5	8.3	7.7	7.6	7.4
Of Latin America	10.0	8.7	7.1	7.7	9.3
Of all developing regions	7.2	5.4	5.1	5.1	5.4

SOURCES: United Nations, *Monthly Bulletin of Statistics*, New York, June 1963 and June 1964; *Statistical Yearbook 1962*; ECLA, *Statistical Bulletin for Latin America*, Santiago, March 1964.

In any case, this analysis shows that, although Latin America stepped up its exports in recent years, their rate of growth continued to lag behind that of world trade as a whole, as regards both the industrialized countries and other countries with similar or competing exports, such as Australia, New Zealand, and parts of Asia and Africa. Latin America thus continues to lose ground on foreign markets, or, what comes to the same thing, the import demand of the industrialized countries is redirected among themselves or diverted to other developing regions.

This can be appreciated, for instance, from recent import trends in the EEC countries and the United States. The EEC countries stepped up their imports in 1960–63 by slightly more than 30 per cent, but their purchases from Latin America increased less than those from other areas. Consequently, Latin America's share in the imports of this group fell from 5.7 per cent in 1960 to 5.5 per cent in 1963. If a comparison is made with previous periods, the difference between the increase in the value of imports from Latin America and those from other areas becomes much greater; thus, for example, in 1955 Latin America's contribution to the total imports of the Community was 6.9 per cent (see table 4).

A similar trend is discernible for Latin America's exports to the United States, which formed a large proportion of that country's total imports. Their share dwindled in the second half of the fifties, partly owing to falling prices for Latin American products, and contracted even more after the shift in Cuba's trade; nevertheless, imports from Latin America still constituted, around 1962 and 1963, a fifth of the total imports entering the United States. In 1962, the United States domestic product increased by 6.0 per cent (in terms of constant prices), and its total imports (in current dollars) by 11 per cent,[2] whereas those from Latin America rose by only 6 per cent. In 1963 the United States product expanded by nearly 4 per cent, and total imports by 5 per cent, but the increase in imports from Latin America was again proportionately less, being only 3 per cent.

Of the markets listed in table 4, Japan was the only country to buy more from Latin America during certain periods than from other areas. This phenomenon was particularly marked in 1961, when Japan's total imports expanded by 24 per cent in terms of volume. By and large, Latin America's share in that total has tended to increase since 1960.

3. GROWTH RATE BY COUNTRIES

Product and income trends for Latin America as a whole differ notably from one country to another, as was suggested at the beginning of this chapter. Hence it is necessary, especially for the purposes of short-term analysis, to undertake a detailed examination of certain countries or groups of countries if a more exact picture is to be obtained of Latin America's economic development in recent years. Figure III, which depicts the trends of the *per capita* product and real *per capita* income in 1950–63 in the majority of Latin American countries, enables certain general conclusions of a comparative nature to be reached with regard to the economic growth rate of the countries in question. These conclusions relate to long-term economic evolution, the decline in the growth rate during the second half of the fifties and recent economic development trends.

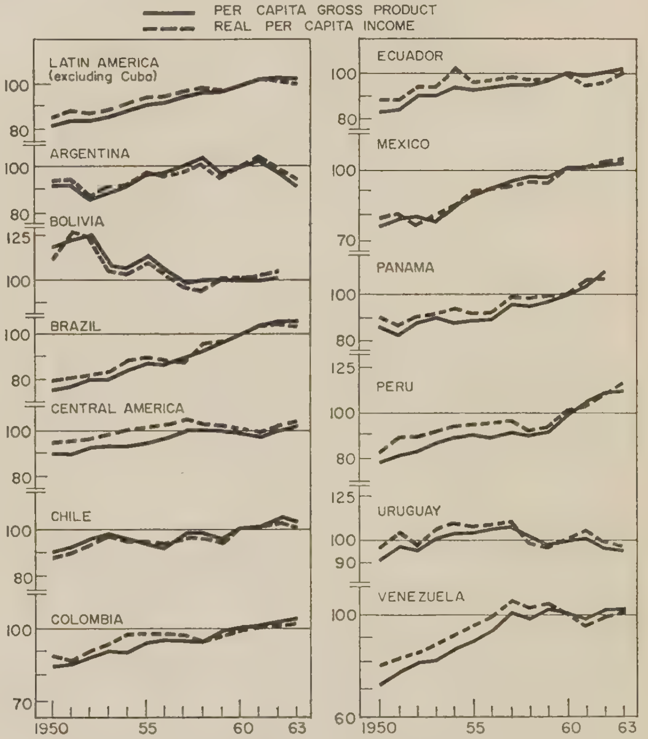
Long-term trends show that Brazil, Mexico, Panama, Peru and Venezuela enjoyed the highest growth rates for both product and income during the period under analysis, while Bolivia, Paraguay[3] and Uruguay form a group in which *per capita* income either decreased or remained the same (see table 5). The remaining countries under consideration fall between these two extremes, with the important exception of Argentina where growth was slower especially if the economic recession suffered by that country during the last two years is taken into account.

Towards the second half of the fifties, the decline in the growth rate became a general feature in nearly every country, although it varied in intensity and duration. This phenomenon seems to have been more pronounced with respect to real income than to the domestic product, owing to the deterioration in the external terms of trade which was fairly marked during this period. The slackening pace of economic growth was reflected in the stagnation or reduction of real *per capita* income in a large number of countries, notably Bolivia, Colombia, Ecuador, the Central American integration area, Uruguay and Venezuela. To these must be added Argentina and Chile, which also experienced a reduction in *per capita* income in 1959.

Figure III. Latin America: *Per capita* gross product and real income in selected countries, 1950–63

(INDEX: 1960=100)

Semi-logarithmic scale



SOURCE: ECLA, on the basis of official statistics.

After the end of the decade these trends were substantially modified, since the rate of economic growth tended to accelerate in nearly all the Latin American countries; at first the change consisted in the recovery of the levels attained in former years, but the upswing persisted in 1962 and 1963, and both *per capita* product and income increased in the majority of Latin American countries. There were five exceptions to this rule: Argentina and Uruguay, where absolute levels of production and income fell in 1962 and 1963; and Brazil, Chile and Peru, where, although total production continued to rise, its rate of growth dwindled in 1963. The *per capita* product continued to expand in the Central American countries, Ecuador, Mexico, Venezuela and Colombia, although in the last two the growth rate in

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[2] At constant prices, the increase in imports was 8.1 per cent in 1962 and 4 per cent in 1963.

[3] This country has not been included in figure III because the information available was incomplete.

1963 was less than in 1962 according to the estimates available up to now (see again table 5).

The economic trends in certain Latin American countries will now be reviewed in broad outline. The aim of this Survey is not to enter into a detailed analysis of the economic situation in each country but to provide supplementary information on the basis of specific examples, in order to bring out the different factors that have been influencing the region's economic development, especially in the last few years.

Table 5. Latin America: Annual growth rate of the gross product in selected countries and areas

(*Percentage*)

Country or area	*1950–55*	*1955–60*	*1960–63*	*1961*	*1962*	*1963*[a]
Latin America, excluding Cuba	5.0	4.7	3.6	5.3	3.5	2.0
Argentina	3.2	2.7	−0.8	5.9	−3.3	−4.7
Brazil	5.7	5.8	4.9	7.7	5.2	2.1
Chile	3.1	3.8	3.9	3.1	7.1	2.5
Colombia	5.3	4.0	4.7	4.9	5.0	3.9
Ecuador	5.3	4.5	4.0	2.8	4.1	5.0
Peru	5.1	4.8	6.7	9.2	7.4	3.6
Uruguay	4.2	0.3	−0.2	2.4	−2.8	−0.3
Venezuela	8.7	6.4	4.6	1.7	6.3	5.8
Central America	4.3	4.1	4.9	2.4	7.1	5.3
Mexico	6.1	6.1	4.8	3.5	5.0	6.0

SOURCE: ECLA, on the basis of official statistics.

[a] Estimates.

(a) *Argentina*

Recent statistical estimates of Argentina's national accounts, prepared by the National Development Council of that country in collaboration with ECLA, enable a more precise examination to be made of the evolution of the Argentine economy in the last few years.[4]

The statistical survey undertaken shows that during the first half of the fifties the gross domestic product increased at an average rate of 3.2 per cent yearly, which fell to 2.7 per cent in the second half of the decade. The product subsequently increased (by 5.9 per cent in 1961), but provisional figures for 1962 and 1963 indicate that the economy of Argentina underwent a severe recession which reduced the domestic product by approximately 4 per cent yearly. Thus, the *per capita* product, which had expanded by only 1 per cent annually during the fifties, rose considerably in 1961 (4.1 per cent) only to shrink by over 5 per cent in each of the last two years. The decline in the *per capita* indexes would have been even more pronounced had it not coincided with a drop in the rate of population growth, which went down to 1.8 per cent after reaching 2.2 per cent in the first half of the fifties.

A more detailed analysis of Argentina's economic development in recent years shows that the changes in the growth rate can be divided into four periods. These are a phase of rapid economic expansion beginning in 1953 and lasting until 1958; a decline in 1959; recovery and expansion in 1960 and 1961; and, finally, an economic recession in 1962 and 1963.

From 1953 to 1958 the Argentine economy advanced fairly rapidly and the domestic product expanded at an annual rate of 4.9 per cent. The principal dynamic factor in this process was industrial development, since agricultural production was virtually at a standstill. Increased activity in the building industry around 1957 and 1958 also played a part.

Industrial production expanded continuously during this period at the high rate of 8.2 per cent yearly. Much the same upward trend was displayed by all branches, the most intensive expansion (12.6 per cent) taking place in activities directly connected with import substitution, such as petroleum derivatives, electrical machinery and equipment, tractors, motor vehicles, rolled products, paper and chemical products.

On the other hand, over-all supplies in the agricultural sector were very unresponsive to the stimulus provided, especially after 1955, by a number of measures arising out of a resolute government policy to increase production. The stagnation of agricultural production, which has been a feature of the Argentine economy since before 1953, has constituted a serious obstacle to development, since, in such conditions, an increase in domestic consumption means a reduction of exportable surpluses, while a policy aimed at developing exports tends to affect, in one way or another, the volume or price of domestic food supplies.

The volume of exports tended to increase after 1956, but their external purchasing power remained below 1953 levels. Consequently the increase in imports entailed by the expansion of investment and industrial production led to relatively large deficits in the current account on Argentina's balance of payments, which were financed by investment, loans and credits from abroad.

Towards the end of 1958 far-reaching economic and financial policy measures were taken to relieve the pressure on the balance of payments, contain inflation and reduce the budgetary deficit. Their method and vigour of application varied from time to time, but they were enforced with particular rigour in 1962 and 1963.

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[4] These estimates are still provisional, and are being revised with the aid of the Central Bank of Argentina, which is responsible for compiling the national accounts. It may be stated, however, in the light of comparisons already undertaken, that any adjustments that may have to be made to the estimates will not modify the general assessment of those aspects of Argentina's economy that are being considered here.

In 1959, there was an interruption of the upward trend recorded for Argentina's economy. The domestic product shrank by 4.6 per cent, and its contraction was shared by industry and building activities, the latter being principally affected by the reduction in public investment.

In 1960, Argentina's economy recovered from its 1959 setback, and in the following year the domestic product reached the highest level recorded for the entire period, though this was only 7 per cent higher than in 1958. However, important changes then took place in the Argentine economy as a whole: there was a considerable increase in the domestic energy supply, owing to the installation of additional capacity for electric energy production and the gradual attainment of self-sufficiency in fuels, which was virtually a *fait accompli* by 1963. An intensive process of industrial re-equipment took place, which extended to the majority of economic activities, and import substitution continued, especially in relation to iron and steel, rolled products, motor vehicles, tractors and other capital goods.

In short, the period 1959–61 was characterized by heavy investment whose coefficient rose in relation to the gross domestic product from 18.8 per cent in 1958 to 23.5 per cent in 1961. An increase of that magnitude in real resources for investment had the effect of limiting personal consumption, which dwindled in 1959 and 1960 and, despite the improvement recorded in 1961, failed to regain the average level of *per capita* consumption reached in 1958.

Imports also underwent an appreciable increase, reaching their maximum for the whole period in 1961, but as current foreign exchange income remained the same the current account continued to show a debit balance. The deficit was met by withdrawals from monetary reserves (1961) and by foreign investment, loans and credits, which were extremely large in comparison with capital movements in previous years. Thus, in 1960 and 1961, the inflow under the head of net autonomous movements of capital was 375 and 460 million dollars respectively, and in 1961 monetary reserves had to be called upon to finance the deficit.

In 1962 and 1963, as has already been pointed out, the product declined at an average rate of 4.0 per cent yearly, and the Argentine economy thus lost the income improvements it had achieved in relation to the levels prevailing in former years. The recession chiefly affected industrial and building activities. Agricultural production, on the other hand, remained at a level very close to that of previous years, and petroleum production did not increase with its wonted rapidity, because import substitution has almost reached saturation point, and expansion will hereafter depend on domestic demand and export possibilities. In the industrial sector, production decreased annually by 6 per cent, the sharpest fall being registered by economic activities connected with the textile and clothing industries and by important branches of the dynamic industries.

A special aspect of the recession in 1962–63 was the evolution of the external sector. Between those two years the volume of exports outstripped the figure recorded for any one year after 1950 and, despite a further deterioration in the external terms of trade, purchasing power also tended to increase. This expansion in volume was made possible by the existence of larger exportable surpluses, deriving partly from the decline in domestic consumption and partly from the emergence of new exports in the manufacturing sector. By means of these exports, industrial entrepreneurs tried to alleviate the difficult situation in which they found themselves as a result of the decline in domestic demand.

As imports were heavily restricted in 1963, the balance of payments on current account showed a surplus (265 million dollars) for the first time in many years despite the economic recession from which Argentina was suffering.

(b) *Brazil*

Three main factors have characterized the evolution of the Brazilian economy since the beginning of the fifties: (*a*) a relatively high and stable growth rate that persisted up to 1961, notwithstanding the chronic stagnation of Brazil's external purchasing power; (*b*) the sharp fall in the growth rate in 1963; and (*c*) the process of inflation, which became exceptionally acute during the last two years.

During the fifties, the Brazilian economy expanded rapidly, and the gross domestic product attained a relatively stable growth rate of 5.7 or 5.8 per cent yearly. In 1961 the rate was even higher (7.7 per cent), but in 1962 it declined to 5.2 per cent, and in 1963 to only 2.1 per cent. Thus, the *per capita* gross product, which increased consistently throughout the fifties at an annual rate of 2.7 per cent, showed an increment of only 2.2 per cent in 1962, and tended to decline in absolute terms in 1963 according to preliminary estimates.

After 1954, Brazil's external terms of trade underwent an intensive deterioration in common with those of all the Latin American countries, as indicated by the index for 1963 which was 32.3 per cent lower than the average for 1950–54. However, the immediate effect of this decline in the growth rate of the product was relatively less severe than in the other countries, because the share of exports in the domestic product had shrunk until by 1963 it had come to represent no more than 5 per cent. The growth rate of real income in Brazil is therefore only one or two tenths of a point below that of the domestic product, although the deterioration in the external terms of trade practically wiped out the additional purchasing power that Brazil would have gained as a result of the improvement in its volume of exports after 1958. In these circumstances, the prime mover behind Brazil's economic expansion during the period under discussion was not the increase in its exports but the rapid expansion of industry.

This is demonstrated by the fact that the manufacturing product expanded at an annual rate of from 8.1 to 10.3 per cent during the fifties, and by as much as 11 per cent in 1961. That is to say that, within a general context of intensive economic growth, the *per capita* industrial product expanded more than twice as fast as the gross domestic product. Consequently, the share of the industrial sector in the formation of the domestic product rose from 20 to 28 per cent in the space of ten years.

The dynamism of the industrial sector began to lose force in 1962, and was considerably reduced by 1963. According to provisional estimates, industrial production in 1962 was still rising at the high rate of 8.4 per cent, but in 1963 its rate of growth was only 2 per cent. The decline spread to all industrial activities with the exception of iron and steel and fuel production, which continued to expand in 1963. The motor vehicle and textile industries were the most seriously affected of all.

This loss of dynamism in the industrial sector can be partly attributed to the fact that import substitution, which was pursued with great energy during the whole of the post-war period, has been completed in important sectors connected with durable consumer goods and intermediate products, and in respect of certain kinds of capital goods. It is plain, therefore, that, given a particular volume and structure of final demand, the dynamic force behind the process of import substitution tends to decline as demand is met by domestically produced goods instead of imports, since from this moment on the subsequent development of production depends entirely on the expansion of final demand. The import substitution of durable consumer goods and, in particular, of motor vehicles, provides a very good illustration of this process, both in Brazil and in Argentina.

Other factors have played a part in the decline of the industrial sector. One of the most important seems to have been the inflationary process which has militated against domestic and foreign investment and has created serious financing problems for both industrial enterprises and the public sector, while other salient factors have been the decline in building activities and the difficulties that have occurred with respect to the supply of electric energy.

In 1962 and 1963, the agricultural sector also contributed to the downward trend of economic growth in Brazil. Adverse weather conditions prejudiced agricultural output, both for export and for domestic consumption. The crop most seriously affected was coffee, production of which fell by 25 per cent in 1963. However, this did not impair exports, thanks to the substantial coffee stocks that had been accumulated in Brazil in previous years.

It has been pointed out above that the external sector has been playing an increasingly minor role in the growth of the domestic economy, but this does not mean that foreign trade has ceased to be a key factor in the country's economic development; on the contrary, its relatively stagnant state has been a serious obstacle which, coupled with the domestic factors already mentioned, was instrumental in reducing the growth rate in 1962 and 1963 and hastening the inflationary process.

Owing to the failure of external purchasing power to expand sufficiently, Brazil took strong measures to limit its imports and these acquired a very inflexible structure, as is demonstrated by the fact that imports of only two essential commodities, wheat and fuel, absorbed 35 per cent of total export earnings. In spite of this, Brazil managed to augment its imports during the second half of the fifties by resorting to external financing, which increased consistently up to 1960, and was obtained in the form of long-term loans and investment and suppliers' credits. After 1960 the influx of this kind of capital remained at a relatively high level, but rose no further, with the result that imports diminished, those of capital goods in particular.

The stagnation in the purchasing power of exports was coupled with an increase in liabilities under the head of amortization and interest in respect of foreign loans and dividend payments on foreign investment, which caused a serious balance-of-payments crisis. The situation can best be described by stating that total financial service liabilities in 1963 represented 43.4 per cent of current foreign exchange earnings.

The inflationary spiral was sharply intensified in the last two years. Up to 1958 the rise in prices had been about 20 per cent annually, according to the cost-of-living index, but in 1959 they went up by 40 per cent; they did not climb quite as steeply in 1960, but the inflationary process thereafter became more acute than ever and prices rose by 45 per cent in 1961 and 80 per cent in 1963, thereby far outstripping the increases recorded in any other Latin American country.

(c) *Chile*

In the last four years the growth rate of the Chilean economy has tended to increase, although there seems to have been a return to a weakening trend in 1963. The annual growth rate of the domestic product was 3.4 per cent in 1950–59, and 4.9 per cent since 1959. If the analysis is extended over the long term, it is clear that economic development has been slow, since despite the evolution of the last few years, the average *per capita* income attained in 1963 was only 11.4 per cent more than the average of the five-year period 1951–55. This comparison shows that the annual increase in *per capita* income over the last decade has been little more than 1 per cent, to judge by the national accounts estimates recently published by the CORFO (Development Corporation) in Chile.

In fact, if the analysis is taken further, these statistical estimates show that during most of the fifties, the product and real *per capita* income remained more or less stationary, or in certain years even declined. From 1959 on, the *per capita* product increased with wide fluctuations from one year to another (4.7 per cent in 1960, 0.8 per cent in 1961, 4.7 per cent in 1962) and remained stationary in 1963, when the increase in the total product was barely sufficient to offset the increase in the population, to judge by the provisional figures published by CORFO.

The evolution of economic activity shown by these indexes was the result of the behaviour of various productive sectors. Reference to the quantum indexes of production available for the analysis of the real changes that occurred in each sector shows that in 1960–63 the most dynamic sector was construction, which increased at the average annual rate of 17 per cent, although this rate fell sharply in 1963. The manufacturing industry also expanded fairly vigorously (at an annual rate of over 7 per cent during the same period). The agricultural sector, on the other hand, had a growth rate only slightly higher than the demographic growth rate, the relative stagnation of the two previous decades thus being maintained. Mining fluctuated from year to year during the same four-year period, but the average annual rate was also very low (1.8 per cent).

After 1960 the terms of trade tended to develop unfavourably for Chile, although the deterioration was not as serious as in other periods. This was due mainly to the stability of copper prices in 1962 and 1963, with a rising trend at the end of 1963. In any case, the index of the terms of trade for 1963 shows a reduction of about 5 per cent compared with 1960. This reduction was apparently due in the main to the gradual increase of the unit cost of imports. The deterioration of the terms of trade even affected the growth rate of income, since between 1960 and 1963 the gross domestic product increased at an annual rate of 4.2 per cent, while real income increased by only 3.8 per cent.

The supply of goods (for consumption and investment) tended to increase in the last few years more rapidly than the domestic product, because imports greatly exceeded exports. Thus whereas the product increased in 1959–63, by 4.9 per cent, the supply of goods increased by 5.4 per cent. Consequently private consumption was able to increase at an annual rate of 4.4 per cent and total gross investment at an annual rate of 14 per cent. Thus it was possible for *per capita* consumption to increase by about 2 per cent annually, although this difference is in relation to a period when levels were very low. The main increase in the supply of goods for domestic use was effected by means of rather extensive net external financing, which amounted to over 5 per cent of the domestic product for the period 1960–63.

The above developments have had two interrelated results, that stand out in the analysis of the Chilean economy during 1960–63, namely, the increase in the rate of gross investment and the increase in the balance-of-payments deficit. The share of gross investment in the total product, which during the fifties rarely exceeded 11 per cent and which was among the lowest in Latin America, rose to 13.5 per cent in 1961, and remained in the region of 13 per cent during the two following years. One of the main components, public and private construction, rose considerably in 1961 (by 37 per cent) as a result of the housing programme undertaken by the Government and the reconstruction of the areas affected by the 1960 earthquake, but growth was slower in the two subsequent years. The other main component, investment in machinery and equipment, increased steadily during 1960–63, and also attained a high annual growth rate, estimated at about 11 per cent.

The balance-of-payments deficit on current account, already traditional during the fifties, climbed to 280 million dollars in 1961, declined somewhat in 1962 and stood at 245 million dollars in 1963.[5] This deficit is mainly imputable to the expansion of imports of goods and services, which in 1960–63 fluctuated between 600 and over 700 million dollars. In the five-year period 1955–59, the imports in question had averaged 400 million dollars yearly. Over against this import trend, the quantum of exports increased slightly (from 510 to 580 million dollars), but the deterioration in the terms of trade almost entirely cancelled out this increment, since in 1963 the purchasing power of exports rose only to 530 million dollars. Consequently, external financing —which had acquired some measure of importance from 1956 onwards—expanded in 1959, and as from 1961 gross inflows of foreign capital under all heads were nearly commensurate with export earnings. This process augmented the foreign currency debt, which, between the end of 1958 and the end of 1962, soared from 616 to 1,350 million dollars (at current prices).[6]

This accounts for the increment in amortization and interest payments, which absorb a steadily increasing proportion of the additional external funds received. In fact, disbursements under these heads—among which those relating to short-term debts preponderated—averaged more than 120 million dollars at current prices in each of the past two years (1962 and 1963). This figure represents, on an average, about one third of gross inflows of foreign capital and approximately 25 per cent of foreign exchange receipts on current account. If to these payments are added remittances of profits on foreign investment, the total amount disbursed in 1963 approaches 200 million dollars at current prices, a sum which corresponds to almost 37 per cent of current foreign exchange income.

The efforts to stabilize the currency which had begun in 1956 continued during the period under review. The expansion of imports from 1960 onwards did much to promote the relative stability of price levels which was achieved between mid-1959 and mid-1962. But despite all endeavours, by mid-1962 it became impossible to maintain this stability any longer.

The Central Bank witnessed a considerable decrease in its foreign exchange holdings towards the end of 1961. In January 1962 the single exchange rate system which had been in force since 1959 was abolished, and two rates were established: an official rate, applicable to export drawbacks, government transactions, "non-prohibited imports" and certain service payments on foreign capital; and a fluctuating free rate for all other transactions, including imports effected through the free ports. In addition, restrictive measures were adopted in respect of imports and the use of foreign exchange. Thenceforward, price levels once again rose at relatively rapid rates, comparable with those prevailing prior to 1957, to such an extent that in 1963 the cost-of-living index and wholesale price index registered upswings of 45 per cent and 50 per cent, respectively.

(d) *Mexico*

In 1963 the Mexican economy regained the impetus it had acquired in the fifties. The domestic product showed an increase of 6 per cent as against increments of 5 per cent in the preceding year and barely 3.5 per cent in 1961 (see again table 5). The *per capita* product, which had remained practically stationary in 1961, rose by 2 per cent in 1962 and nearly 3 per cent in 1963. Between 1960 and 1963 the average annual rate of growth of real income (5.1 per cent) slightly exceeded that of the product, owing to the improvement in the terms of trade, which was determined not so much by higher export prices as by a reduction of the unit value of imports.

The recovery of the growth rate, which began towards mid-1962, was particularly influenced by the expansion of external demand which was the outcome of parallel increases in exports of goods and in income accruing from the tourist industry. Between 1960 and 1963 the value of exports of goods leapt from 780 to 982.5 million dollars, chiefly owing to the larger volumes shipped, since unit values remained virtually stable, rising only slightly in 1963. One determining factor was the upward trend of prices for goods that have been acquiring importance in recent years, such as sugar, shrimps and tomatoes; and another was a recovery in quotations for cotton and zinc. On the other hand, unit values of lead and cattle exports continued to decline.

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[5] Unless otherwise indicated, references in this paragraph are to dollars at 1960 prices.

[6] Budget Office, *Report on the Financial State of the Nation*, Pamphlet 104, November 1963, p. 56.

The buoyant trend of Mexico's exports in the last three years was due almost exclusively to greater diversification as regards both agricultural commodities and manufactured products. In addition, there was an increase in sales to ALALC countries, the total value of which rose from 7.9 million dollars in 1961 to 26.0 million in 1963, 85 per cent being accounted for by manufactured goods.

The total value of Mexico's traditional exports—cotton, coffee, lead, zinc and copper—remained the same, except in 1962 when a bumper cotton crop raised exports to 425,000 tons—39 per cent more than in 1961. But the aggregate value of their sales in 1963 dropped to the 1960 level of 319 million dollars, because of a reduction in the volume of cotton and coffee sold. However, sales will very probably be larger in 1964 thanks to the rise in world market prices for primary products towards the end of 1963 and the expected increase in the cotton and coffee crops.

Apart from external demand, another factor to play a part in reactivating the economy was public expenditure, although its contribution was irregular during the three years under consideration. While the current expenditure of the Federal Government increased at a fairly steady pace, the total investment expenditure of the public sector rose sharply in 1961 (24 per cent), edged upwards in 1962 and climbed steeply again in 1963 (16 per cent). Up to 1961 public investment had been concentrated in the transport, energy and fuels sectors, and was largely financed by foreign loans. The increases recorded in the next two years chiefly reflect the expansion of investment in social works and, in 1963, in the agricultural sector as well. Private investment remained at relatively low levels in 1961 and 1962 but increased by 11 per cent in 1963, nearly regaining its 1960 level. Public investment helped to offset the contraction in private investment and kept up the over-all level. Total investment increased by 12 per cent in 1963, the public and private sectors contributing in almost equal proportions to this improvement.

The decline of private investment and the relative stagnation of agricultural production appear to have been the fundamental reasons for the fall in the growth rate in 1961, which affected all sectors of the economy, except petroleum and electric energy. In 1962 the main dynamic impulse came from the increase in agricultural production and the improvement in foreign trade. In 1963, however, the recovery of private investment helped to reinforce the effects on domestic demand of the increase in exports of goods and services and in public expenditure, and this led to an expansion in almost all productive sectors of the economy.

The manufacturing industries—particularly those producing consumer goods, which were using little of their productive capacity—succeeded in expanding their output without affecting costs. Together with the increase in the supply of domestic foodstuffs and of imported consumer goods, this was responsible for keeping the rise in prices to less than 1 per cent in 1963. The trend towards price stabilization, which had already been aided by the slower growth of domestic demand in 1961 and 1962, was thereby confirmed.

Imports, which had decreased in 1961 and 1962, rose by 8.5 per cent in 1963 in terms of current values. The increment consisted mainly of raw materials and, to a lesser extent, of capital goods.

Net tourist income rose at much the same pace as exports (from 272 million dollars in 1960 to 352 million in 1963), and helped to reduce the balance-of-payments deficit on current account.

Foreign long-term credits increased considerably from 340 million dollars in 1960 to 341 million in 1961 and 400 million in 1962, thereafter dropping to 386 million in 1963. However, the amortization of the credits in question increased at an even swifter rate between 1960 and 1962 (from 164 to 265 million), declining to 231 million in 1963. During the three years under consideration the credits were mainly used to finance public investment in the transport, energy and petroleum sectors. In 1963 an additional source of revenue became available for that purpose for the first time in several decades, i.e., the income deriving from the sale of 40 million dollars' worth of government bonds on the financial markets of Europe and the United States.

The Bank of Mexico's international reserves went up by 69 million in 1963, to reach a total of 476 million at the end of the year. This reflects the increase in the inflow of long-term capital, as well as the repatriation of private short-term capital in 1963.[7]

(e) *Central America*

Towards the end of the fifties, the Central American countries witnessed a considerable decline in their rate of economic growth. In 1957–60 the growth rate of the product was barely 2.8 per cent annually, whereas it had been rising by 4.6 per cent every year from 1950 to 1957. The deterioration in the external terms of trade was an important adverse factor during the period 1957–60. In fact, it was so severe that the purchasing power of exports dwindled by 2.1 per cent per year, although there was a 7.1 per cent yearly increase in volume.

Thus, although the Central American countries received a larger influx of net capital, their imports declined. Government tax revenue also declined, as did public and private investment.

From 1960 onwards, the economic situation in Central America was substantially modified: agricultural production ceased to be stagnant, achieving a growth rate of 5.2 per cent per year, and industrial production expanded vigorously by 8.2 per cent annually. In short, the overall domestic product accelerated its growth rate to 4.7 per cent in 1962 and to 5.3 per cent in 1963 (see again table 5).

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[7] See Bank of Mexico, *Informe Anual 1963*, p. 53.

The main factors responsible for first the recovery and then the expansion of the Central American economy were the increase in exports and the progress made in economic integration. Similarly, external financing and an economic and financial policy applied selectively and directed towards the promotion of development, helped to further the improvement of the Central American economy.

Exports, the principal dynamic factor, increased in volume by over 10 per cent a year from 1960 onwards, and as the deterioration from which the terms of trade had been suffering since the mid-fifties became less acute, the purchasing power of exports grew during 1962 and 1963 at an average rate of 13 per cent annually. In these circumstances, the net inflow of capital represented an addition to external purchasing power. Imports augmented, the financing of government expenditure was aided by the increase in current revenue, and the Central American countries were able to replenish their monetary reserves, which had fallen sharply in earlier years.

The notable expansion of exports during 1960–63 was due to the rise in the productivity of the principal export activities. Greater use of modern techniques raised the yield of coffee plantations, and production was expanded without any additions to the area under cultivation. Similarly, the achievement of greater efficiency in cotton growing, thanks to a more rational use of fertilizers and pesticides and more effective management, enabled growers to maintain a high level of yield and to enlarge the area under cultivation. Production therefore increased in conditions of high economic efficiency.

The policy of integration also influenced the evolution of the Central American economy in recent years. By virtue of the General Treaty on Central American Economic Integration, signed in December 1960, four countries belonging to the integrated group established a free-trade area embracing over 90 per cent of the products originating in their respective territories; plans were also made for a uniform tariff policy, and various provisions for equalization of customs duties that affect half the import tariff are already in force.

The effects of these and other integration measures can be seen in the expansion of reciprocal trade and industrial development within the integration area. Inter-Central American trade increased by 22 per cent between 1960 and 1963, and attained a value of some 60 million dollars in the latter year, i.e., 10 per cent of total exports of goods from the five countries concerned.

The liberalization of trade and the tariff modifications introduced as a result of the integration policy widened the market and stimulated industrial demand. The increase in production was therefore achieved largely on the basis of more intensive utilization of existing capacity in the industrial sector. Industrial production was still geared principally towards domestic markets, but was at the same time promoting a dynamic flow of trade between the countries belonging to the Central American Common Market. As a result, exports of manufactured products climbed at a rate of 30 per cent annually after 1960, and by 1963 amounted to 43 million dollars in value, in other words, over 70 per cent of the total internal trade of the area.

(f) *Uruguay*

The economy of Uruguay has continued in recent years to suffer from the stagnation which has characterized it since the middle of the fifties. The domestic product rose in 1961 by 2.4 per cent (see again table 5), but fell in the next two years until it barely maintained its 1960 level; as a result, the *per capita* product was 5.7 per cent less in 1963 than in 1960. Real income decreased even more and was accompanied by a persistent deterioration in the external terms of trade, the index for which showed a reduction of 11.0 per cent between 1960 and 1963.

Uruguay possesses one of the highest average *per capita* income levels in Latin America, and, to judge from various indications, income distribution is less inequitable there than in the majority of Latin American countries. However, various factors connected with the size of the market and the structure of the economy constitute serious obstacles to the future economic growth of the country.

One of the most important of these factors is the inadequate development of exports, as regards both volume and diversification. Exports chiefly consist of raw materials, such as meat, wool and hides, which, in contrast to the exportable products of other Latin American countries, have access to an ample domestic market for final consumption or for elaboration.

In point of fact, exports represent less than 30 per cent of total production in the agricultural sector, since the remaining 70 per cent is destined for domestic consumption. In these circumstances, the inflexibility displayed by the agricultural sector as regards raising its productivity and increasing and diversifying production has had the effect of limiting exportable surpluses. This prevents any increase in imports, which, in its turn, has an adverse effect on investment and on the level of internal economic activity. With conditions as they are, it is not easy for the Uruguayan economy to make a new dynamic push towards import substitution, because this process has already been going on for a long time in the easier sectors such as consumer goods.

The evolution of sectoral production reveals very significant aspects of this weakening in the Uruguayan economy. The manufacturing product has been falling by 3.4 per cent yearly since 1960, and building activity has undergone such a marked decline that the volume estimated for 1963 was 42 per cent less than in 1960. These two activities determined the stagnation of the over-all product during 1963, a further contributing factor being the sharp diminution in agricultural output in 1962 (12.0 per cent below the previous year's level) as a result of adverse climatic conditions. Thus, in 1963, the agricultural sector played a larger part in the formation of the domestic product, less because of an increase in production than because of the decline in transforming activities.

This evolution of the Uruguayan economy has been closely associated with an acceleration of the inflationary process. Prices, which had doubled during the four-year period 1955–59, redoubled in the next three years up to 1962, and in 1963 rose by nearly 20 per cent.

(g) *Venezuela*

From 1950 to 1957 the Venezuelan economy enjoyed a period of rapid expansion that was more intensive than that of any other Latin American country, to judge by the growth rate of the domestic product, which was 9.4 per cent annually. Exports, chiefly of petroleum, and petroleum investment, were the main dynamic factors in the development of the economy. During this period imports of goods increased at the high rate of 11.4 per cent yearly, thereby outstripping the product and real income, and rose from 825 million dollars to 1,760 million between 1950 and 1957 (at constant 1960 prices).

From 1957 onwards, the evolution of the external sector was substantially modified. The volume of exports dwindled slightly in 1958, but then expanded continuously until 1963, although much more slowly than in the past. The external terms of trade, which had improved around 1957, worsened appreciably owing to the fall in petroleum prices and the increase in the unit value of imports. Hence, although the volume of exports increased by 2.5 per cent annually, their purchasing power declined by 1.9 per cent on an average.

This decline in purchasing power was accompanied by a continuous outflow of capital as a result of the reduction in petroleum investment, debt servicing and other movements of funds, all of which created a serious balance-of-payments problem and affected the financing capacity of the public sector.

Given the structure of the Venezuelan economy in 1957, this adverse evolution of the external sector would have profoundly depressed the levels of economic activity and of income had it not been for substantial changes in economic policy from 1958 onwards. When the purchasing power of exports began to decrease in 1958, the consequences of the deficit that had accumulated in the public sector as a result of the relatively high government expenditure in previous years had to be faced. Movements of capital began to show a net outflow of 200 to 260 million dollars in 1958–59, and Venezuela was obliged to draw upon its monetary reserves and incur compensatory loans in order to meet its pending financial obligations and current balance-of-payments commitments. The Government took measures to restrict non-essential imports and to provide for a more rational use of the foreign exchange available. With this end in view, the customs tariff was modified in 1959, and exchange controls were introduced in 1960. At the same time public investment was reduced, with an eye to eliminating investment with a low rate of return. Imports of goods and services fell from 2,300 million dollars to 1,470 million between 1957 and 1961, i.e., by 36 per cent. In spite of this, the domestic product increased during that period by 11 per cent (at an average annual rate of 2.7 per cent). In 1962 and 1963, the purchasing power of exports continued to decline, disinvestment in the petroleum sector persisted, but economic activities recovered and achieved a higher growth rate than that recorded in the years immediately preceding this period. Economic and social policy measures were instrumental in reorganizing the allocation of resources among the different economic and social sectors and played a particularly important part in determining the use made of foreign exchange through the control and modification of the import structure. Existing production capacity was utilized more intensively, and import substitution gave the Venezuelan economy a fresh impetus in a more diversified context, although this does not mean that the economy no longer needs to stimulate its foreign trade to achieve desired export levels and amplify the basic export structure.

During the past two years the average growth rate for agricultural production has been 6 per cent annually, and for industrial production over 8 per cent; building activities have tended to recover after their previous contraction, and the over-all product has expanded at the rate of 6.5 per cent annually, or 2.5 per cent in *per capita* terms.

B. DYNAMIC FACTORS IN FINAL DEMAND AND THE EVOLUTION OF AVAILABLE RESOURCES

1. Dynamic factors in final demand

This section examines the evolution of two aspects of the Latin American economic process. In the first place, an analysis is made of the changes in the components of final demand, namely, consumption, investment, and exports, in relation to the evolution of the domestic product and real income. Secondly, a study is made of the complementary aspect, which concerns the respective parts played by domestic production and imports in satisfying final demand. In this way, an effort is made to identify the most dynamic factors in final demand and thereafter to determine the respective shares of domestic production and imports in the total supply of resources, the course of import substitution and the subsequent modifications in the production structure. The examination will be confined to the general evolution of these economic concepts on the lines of the analytic scheme set forth before, and will serve as an introduction to later sections in which a more searching analysis will be made of the salient aspects highlighted here.

Among the components of final demand, exports of goods and income from the tourist trade constituted the item that increased the most over the last three years, in terms of volume. In fact, the figures in table 6 show that between 1960 and 1963, Latin America's aggregate exports of goods and tourist income grew at a cumulative annual rate of 5.3 per cent, thus continuing the upward trend recorded in previous years; total consumption, on the other hand, grew by 3.6 per cent while gross investment increased very slowly, at a rate of less than 1 per cent (see also table 7).

In other words, since the middle of the fifties, Latin America has been expanding the volume of its exports of goods and tourist income at the same pace as the domestic product or, in some years, even more swiftly, with the result that the export coefficient has been maintained or has tended to increase since the middle of that decade. This phenomenon is reflected in the similarity shown by the curves for the product and exports of goods (see figures IV and V), which would be even closer if tourist income were included since this has increased more than exports, though with a tendency to concentrate in one country—Mexico.

Table 6. Latin America: Growth rates of the product and income and evolution of the external sector
(*Annual cumulative rate of growth*)

Period or year	*Gross product*	*Real income*	*Population*	*Volume of exports of goods and tourist income*		*Purchasing power of exports*[a]	*Volume of imports of goods and services, including the tourist trade*[b]	*Import coefficient of goods and services*[b] *(as percentage of total domestic product)*
				Total	*Goods*			
				Latin America (excluding Cuba)				
1950–55	5.0	4.8	2.8	3.1	2.7	1.6	3.9	12.6
1955–60	4.7	4.3	2.9	4.7	4.7	1.8	3.4	11.7
1960–63[c]	3.6	3.5	2.9	5.3	5.2	4.3	+0.5	10.6
1961	5.3	5.4	2.8	3.4	3.2	4.2	4.0	10.9
1962	3.5	2.8	2.8	9.1	9.3	3.0	−0.6	10.5
1963[c]	2.0	2.2	2.9	3.6	3.3	5.7	−1.9	10.1
				Latin America (excluding Argentina and Cuba)				
1950–55	5.6	5.4	2.9	4.2	3.8	3.1	5.1	14.3
1955–60	5.2	4.8	3.0	4.6	4.6	1.2	3.1	13.2
1960–63[c]	4.7	4.6	3.0	5.0	4.8	3.8	1.4	11.3
1961	5.2	5.2	3.0	5.3	5.3	5.8	1.0	11.5
1962	5.3	4.7	3.0	5.4	5.3	0.5	0.1	11.0
1963[c]	3.7	3.8	3.0	4.2	3.9	5.2	2.0	10.9

Sources: ECLA, on the basis of official statistics and International Monetary Fund publications.

[a] Purchasing power of exports of goods and the tourist trade.

[b] Annual averages for the periods or years indicated.

[c] Provisional figures.

Table 7. Latin America (excluding Cuba): Growth rate of final demand and of available resources
(*Annual cumulative rate of growth*)

	1950–55	*1955–60*	*1960–63*[a]	*1961*	*1962*	*1963*[a]
Real income	4.8	4.3	3.5	5.4	2.8	2.2
Gross domestic product	5.0	4.7	3.6	5.3	3.5	2.0
Imports of goods and services, including the tourist trade	3.9	3.4	0.5	4.0	−0.6	−1.9
Consumption	4.5	4.3	3.6	5.9	3.0	2.0
Public	5.5	6.2	3.2	4.9	1.7	3.0
Private	4.4	4.0	3.7	6.1	3.2	1.8
Exports of goods and tourist income	3.1	4.7	5.3	3.4	9.1	3.6
Exports of goods	2.7	4.7	5.2	3.2	9.3	3.3
Purchasing power of exports of goods and the tourist trade	1.6	1.8	4.3	4.2	3.0	5.7
Purchasing power of exports of goods	1.4	1.4	4.0	3.7	2.8	5.7
Total gross investment	8.3	5.6	0.5	3.0	−0.1	−1.3
Fixed investment	6.9	5.0	0.1	3.2	1.1	−3.8
Public	5.9	6.3	1.4	3.6	0.1	0.4
Private	7.3	4.4	−0.5	3.0	1.6	−5.8

Source: ECLA, on the basis of official statistics.

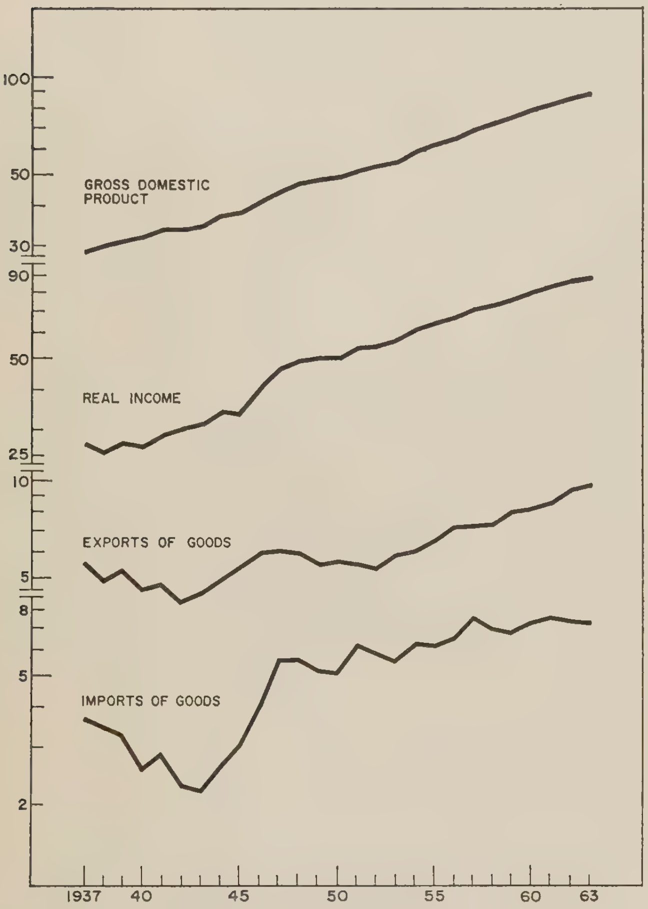
[a] Provisional figures.

Consequently, there has been a definite change in the relation between exports and the domestic product in the region as a whole. Between the end of the Second World War and the early years of the fifties the volume of exports tended to decline or stagnate, whereas the domestic product increased at a relatively swift pace. From 1950 to 1955 the volume of exports and tourist income averaged an increase of 3.1 per cent yearly, the former being the slower of the two (2.7 per cent) whereas the rate for the domestic product was much quicker (5.0 per cent). In the second half of the fifties and the early years of the sixties the expansion in the volume of exports accelerated (see again table 7), while that of the gross domestic product slackened off.

It should be pointed out, before the analysis is pursued any further, that the trend of Argentina's exports and, to a certain extent, of Brazil's as well, was particularly responsible for the slow expansion of the volume of exports during the first half of the fifties. This is made quite clear if the figures for Argentina and Cuba are excluded from the regional totals. In this case, the volume of total exports of goods and tourist income stepped up its rate of increase from 4.2 per cent annually in the first half of the fifties to approximately 5.0 per cent in 1955–63 (see table 8). If tourist income is not counted, exports expand more slowly, the relevant annual rate rising from 3.8 per cent in 1950–55 to 4.6 per cent in 1955–63. This analysis makes it plain that, when Argentina is excluded, the growth rate for the volume of goods and tourist income exported by the Latin American countries is less irregular, although it also tended to speed up after the middle of the fifties. Nevertheless, this group of countries showed a declining growth rate for the product in common with the region as a whole; in other words, the volume of Latin American external demand intensified its rate of growth, while that of the domestic product slackened off and that of real income fell even more sharply.

Figure IV. Latin America: Long-term evolution of the gross domestic product, real income and of the volume of exports and imports of goods, 1937–63

(THOUSANDS OF MILLIONS OF 1960 DOLLARS)
Semi-logarithmic scale

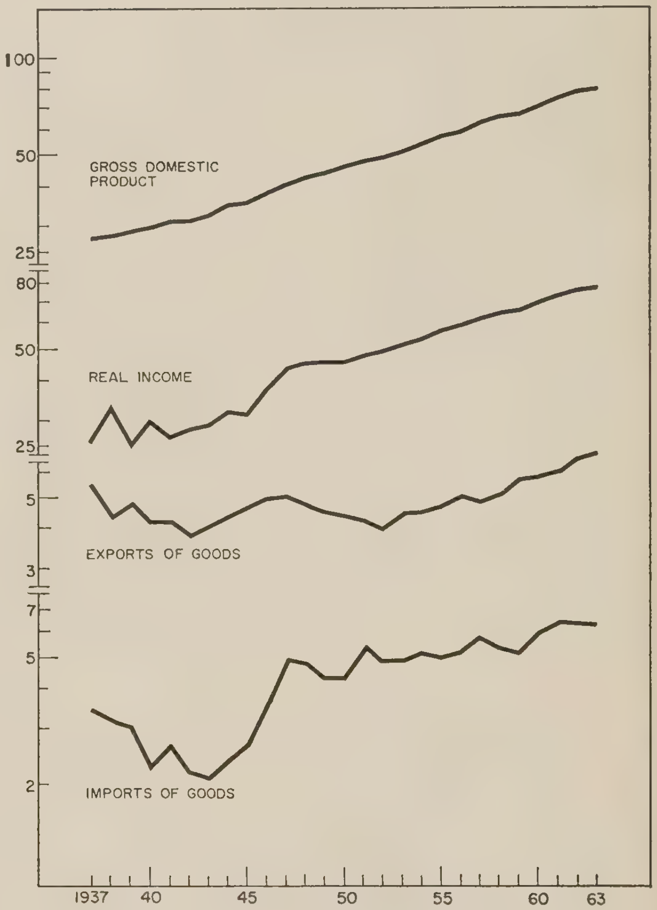


SOURCE: ECLA, on the basis of official statistics.

The deterioration in the external terms of trade was precisely the factor that cancelled out most of the dynamic effect that the expansion of exports might have had on the growth of the Latin American economy. The relative magnitude of the deterioration may be appreciated from a comparison between the respective growth rates of the volume of exports and of external purchasing power.

Figure V. Latin America (excluding Venezuela): Long-term evolution of the gross domestic product, real income and of the volume of exports and imports of goods, 1937–63

(THOUSANDS OF MILLIONS OF 1960 DOLLARS)
Semi-logarithmic scale



SOURCE: ECLA, on the basis of official statistics.

If the analysis is limited to exports of goods in order to eliminate the influence of the increase in tourist income from which Mexico benefited in particular, it will be seen that for the region as a whole the value of exports, in terms of purchasing power, rose at an annual average rate of only 1.4 per cent between 1955 and 1960 and of 4.0 per cent from 1960 onwards, whereas the volume of exports averaged higher annual rates of 4.7 and 5.2 per cent respectively during the two periods in question. If this evolution is compared with prevailing trends in the first half of the fifties, it will be seen that while the volume of exports stepped up its annual rate of growth from 2.7 to 4.7 per cent in the second half of the period, their value, in terms of purchasing power, merely edged up by 1.4 per cent annually throughout the whole of the fifties (see again table 7).

Table 8. Latin America (excluding Argentina and Cuba): Growth rate of final demand and of available resources

(*Annual cumulative rate of growth*)

	1950–55	*1955–60*	*1960–63*[a]	*1961*	*1962*	*1963*[a]
Real income	5.4	4.8	4.6	5.2	4.7	3.8
Gross domestic product	5.6	5.2	4.7	5.2	5.3	3.7
Imports of goods and services, including the tourist trade	5.1	3.1	1.4	1.0	0.1	3.0
Consumption	4.9	5.2	4.7	5.2	5.4	3.5
Public	6.8	6.8	4.5	5.6	3.5	4.3
Private	4.7	4.9	4.7	5.1	5.7	3.4
Exports of goods and tourist income	4.2	4.6	5.0	5.3	5.4	4.2
Exports of goods	3.8	4.6	4.8	5.3	5.3	3.9
Purchasing power of exports of goods and the tourist trade	3.1	1.2	3.8	5.8	0.5	5.2
Purchasing power of exports of goods	3.1	0.6	3.5	5.5	−0.1	5.1
Total gross investment	10.2	4.6	2.4	2.1	1.4	3.7
Fixed investment	9.0	3.6	1.4	0.9	4.3	1.0
Public	10.8	5.2	1.7	3.7	0.3	1.2
Private	8.1	2.8	1.2	0.7	3.5	0.9

SOURCE: ECLA, on the basis of official statistics.

[a] Provisional figures.

Table 9. Latin America (excluding Argentina, Brazil and Cuba): Growth rate of final demand and of available resources

(*Annual cumulative rate of growth*)

	1950–55	*1955–60*	*1960–63*[a]	*1961*	*1962*	*1963*[a]
Real income	5.5	4.3	4.5	3.9	4.6	4.9
Gross domestic product	5.6	4.8	4.6	3.7	5.4	4.6
Imports of goods and services, including the tourist trade	6.6	2.1	2.9	3.7	0.8	4.1
Consumption	5.2	4.8	4.2	3.9	4.2	4.5
Public	6.4	6.9	5.0	5.2	4.0	5.7
Private	5.1	4.7	4.1	3.7	4.3	4.3
Exports of goods and tourist income	5.4	4.7	4.1	4.2	8.6	1.9
Exports of goods	4.9	4.8	4.6	4.1	8.5	1.2
Purchasing power of exports of goods and the tourist trade	4.6	1.3	4.2	5.3	3.8	3.6
Purchasing power of exports of goods	4.7	0.7	3.8	4.8	3.3	3.2
Total gross investment	8.8	2.8	4.6	2.2	3.8	7.8
Fixed investment	9.8	2.2	4.6	1.4	4.7	7.6
Public	15.8	0.7	5.7	6.0	0.6	10.7
Private	6.9	3.1	3.9	−1.0	7.0	5.9

SOURCE: ECLA, on the basis of official statistics.

[a] Provisional figures.

The evolution of this phenomenon will now be examined in the group that excludes Argentina and Brazil, two countries whose exports stagnated or else grew very sluggishly from the beginning of the fifties onwards (see again table 8 and table 9). In this group, the value of exports, in terms of purchasing power, underwent a marked decline in the second half of the decade. At the beginning of the period, purchasing power was increasing at an annual rate of 4.7 per cent (see again table 9), but this subsequently weakened to less than 1 per cent. It tended to recover after 1960, but its average annual rate in the last four years has been only 3.8 per cent. This unfavourable turn of events occurred when the volume of exports was expanding rapidly at a rate of between 4.9 and 4.6 per cent a year.

In these circumstances, although external demand in terms of volume constituted the most dynamic element in final demand, the deterioration caused by the fall in the external terms of trade meant that its ultimate dynamic effect was less forceful and that, as a result, greater importance was attached to the relative variations in consumption and investment. In Latin America as a whole (see again table 7), both the volume and purchasing power of exports of goods and of the tourist trade recorded, in 1960–63, a greater increment than consumption and investment. But if Argentina and Brazil are excluded (see again tables 8 and 9), other components of final demand, such as consumption and investment, show increases that match or exceed the expansion in exports.

In the region as a whole, the average increase in total gross investment over the period 1960–63 was less than 1 per cent yearly; moreover, if inventory changes are excluded, fixed investment barely maintained its level, with the result that, in the general context of Latin American evolution over the last three years, investment stands out as the least dynamic element in final demand. This is another radical difference in recent economic trends, since during the fifties investment was the most dynamic of all the components of final demand, notwithstanding the decline that took place towards the end of the decade. In fact, in 1955–60, total fixed investment grew at an annual rate of 5.6 per cent, i.e., more rapidly than consumption (4.3 per cent) or the volume of exports of goods (4.7 per cent).

In actual fact, total investment did expand in 1961 and 1962, albeit very slowly, but in 1963, when gross fixed investment contracted by nearly 4 per cent, the level of total investment dropped to almost the same as in the three previous years. The reduction of investment in Argentina and Brazil was largely responsible for the decline and contraction of this component in aggregate terms. The remaining countries of the region stepped up the pace of investment to such an extent that by 1962–63 it was expanding at an annual rate of 6 per cent, that is, more rapidly than in the latter half of the fifties. Domestic investment was an important dynamic factor in this group, since it outstripped total consumption and even drew near to the average variations recorded in the volume of exports. The intensification of the investment process thus coincided, in this particular group of countries, with a significant recovery in the growth rates of the product and income.

The weakening of the over-all investment trend in Latin America after 1960 was recorded in both the private and public sectors. Nevertheless, over the long term, public investment was the more vigorous of the two. Hence, if a comparison is made of investment levels in 1950 and 1963, the growth rate of private investment will be found to have been 2.5 per cent annually as against 4.4 per cent for public investment.

In the group of Latin American countries public investment has been growing less rapidly in Argentina and Venezuela in recent years.Thus the relative dynamic strength of public investment in the remaining Latin American countries becomes even greater, its average rate of growth being 5.7 per cent a year in comparison with only 1.4 per cent for private investment, again in the first and last years of the period 1955–63. Although external financing was an important factor in the expansion of public investment, it should be noted that investment increased most rapidly in the first half of the fifties when the external purchasing power of this group of countries stimulated both the product and real income to make greater progress.

Private and Government consumption are the other two components of final demand whose evolution should be studied in order to complete the analytical plan proposed for this section. The course followed by private consumption in Latin America as a whole has been similar to that of real income, and its rate of growth weakened considerably from the mid-fifties onwards in just the same way. After 1960 private consumption increased by an average of only 3.4 per cent a year, and if population growth is allowed for, the average rate of *per capita* consumption was less than 1 per cent annually.

If Argentina, which experienced a severe recession in the last two years, is excluded, the remainder of the Latin American countries show a more favourable consumption trend, but, in any case, the improvement in the average *per capita* index was only 1.5 per cent annually. In the lower-income brackets average *per capita* consumption may well have increased still less or even have declined in the countries where income has tended to be more concentrated or employment levels have dropped.

Government consumption in the region as a whole also expanded slowly after 1960. Its annual rate of growth was barely 3 per cent, i.e., half as much as in previous years. This slow upward trend came after a decade of rapidly rising consumption when the average annual rate of growth was approximately 6 per cent, far outstripping that of private consumption.

The smaller increments revealed by the statistics for government consumption in the region as a whole between 1960 and 1963 were mainly a result of the reduction or slower growth of government expenditure in Argentina and Brazil. In the rest of the Latin American countries, government consumption expanded with greater vigour at an average rate of 5.0 per cent yearly, that is, more rapidly than private consumption.

The increase in government expenditure on consumption during the fifties and the continuation of the upward trend in the majority of Latin American countries reflects, to a certain extent, an improvement in the provision of social services and is also the result of increased employment in them.

2. AVAILABLE RESOURCES AND THE RESPECTIVE CONTRIBUTIONS OF DOMESTIC PRODUCTION AND IMPORTS

The aggregate amount of resources used to satisfy final demand, the evolution of which was examined in the previous section, has shown an average increase of 3.2 per cent a year for the region as a whole from 1960 onwards.

Its two components, imports and the gross domestic product, took very different courses. Imports declined in 1962 and 1963 and their relative contribution to the final supply of goods and services shrank appreciably, while the domestic product continued to grow and to account for a larger share of resources. Hence, the coefficient for the relation between the volume of imports of goods and services and the gross domestic product dropped from 11.0 per cent in 1960 to 9.6 per cent in 1963; this shows that in recent years Latin America has continued to reduce its import coefficient, as it has been doing for some time (see again table 6).

The downward trend of the import content in the total sum of the region's consumption and investment derives primarily from three factors that have been cramping the relative expansion of imports: import substitution, the severe restrictions imposed in some countries, and the decline in investment or internal economic activity.

These factors have operated with varying intensity according to the country concerned. For example, the decrease in imports recorded for the region as a whole in 1962–63 was mainly determined by Argentina and Venezuela, since the other Latin American countries stepped up their purchases after 1960 and the upward trend becomes even more pronounced if Brazil is excluded as well.

The import coefficient fell in these three countries, particularly in Venezuela. Its decline was evidently a result of the concurrent action of the three factors indicated above, although the influence exercised by each one may not have been equally forceful in each country. However, the import trend has been irregular in other Latin American countries as well. For instance, the group of countries excluding Argentina and Venezuela recorded an import coefficient that was rather more stable than that of the region as a whole, while in other countries, as, for example, the Central American integration area, the increase in its coefficient was matched by an expansion in industry and a fresh upward trend in the domestic product.

C. THE EVOLUTION OF INVESTMENT AND OF THE DOMESTIC PRODUCT BY MAJOR ECONOMIC SECTORS

1. CHANGES IN THE INVESTMENT COEFFICIENT AND STRUCTURE

In studying the components of final demand in the preceding section, stress was laid on the slow rate at which the volume of total investment expanded and the decline it underwent towards 1963. If the trend of investment is now compared with that of the domestic product it will be seen that the investment coefficient tended to fall from 1960 onwards. The figure for total gross capital formation, which includes gross fixed investment and inventory changes, shows that the coefficient dropped from 18.4 per cent in 1960 to about 17.0 per cent in 1963, and that fixed investment also declined (from 17.3 to 15.6 per cent between 1960 and 1963).

The behaviour of investment is essentially a reflection of the far from satisfactory evolution of the Latin American economy, since the acceleration of Latin America's rate of economic development in future years depends precisely on whether a substantial increase can be achieved in the investment coefficient. The drop in the coefficient is also a sign, at least in so far as the region as a whole is concerned, that Latin America's growing indebtedness will not eventually bring about a relative expansion in capital formation, and that domestic saving is failing to develop to the extent required by external debt servicing and economic development needs.

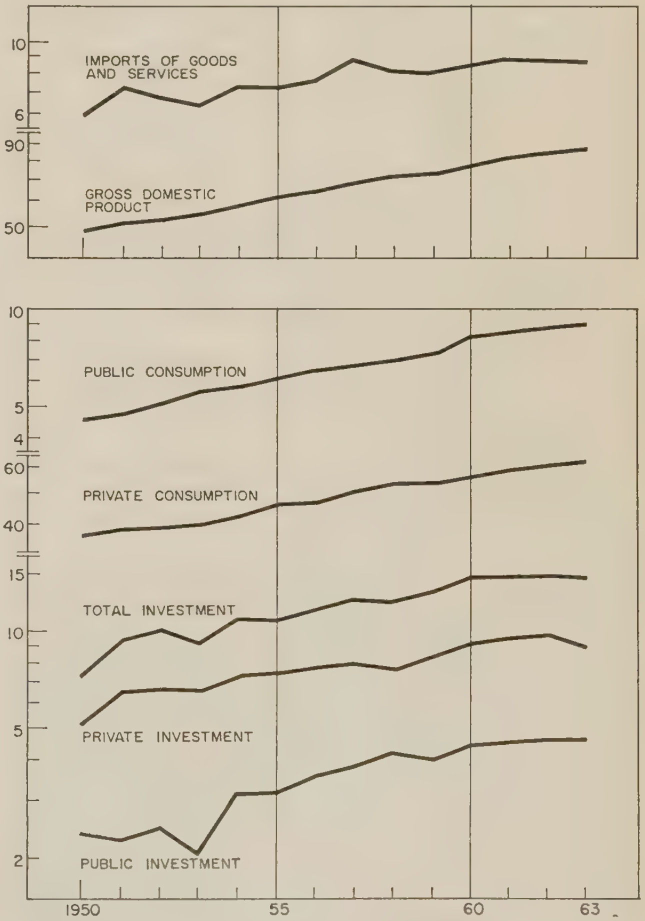
A factor that undoubtedly played a part in lowering the coefficient and level of investment was the marked weakening of the economic growth rate, although this derived at the same time from a lack of dynamism in investment. Another factor that affected both was the deterioration of the external terms of trade which, by reducing the purchasing power of exports, restricted imports and thereby directly militated against investment and the growth of real income. The effect wrought on investment by import controls was reflected, to a great extent, in the reduction which took place after 1960 in the relative volume of machinery and equipment intended for gross capital formation, either in terms of their share in total investment or in relation to the domestic product (see figures VI, VII and VIII).

These general considerations should now be supplemented by a review of the evolution of investment in individual countries, since here, as in other important aspects of Latin America's economic development process, particular patterns of behaviour were followed by certain countries whose figures carry weight in the over-all picture. To that end, table 10 groups together

Figure VI. Latin America: Product, consumption, investment and external sector, 1950–63

(THOUSANDS OF MILLIONS OF 1960 DOLLARS)

Semi-logarithmic scale



SOURCE: ECLA, on the basis of official statistics.

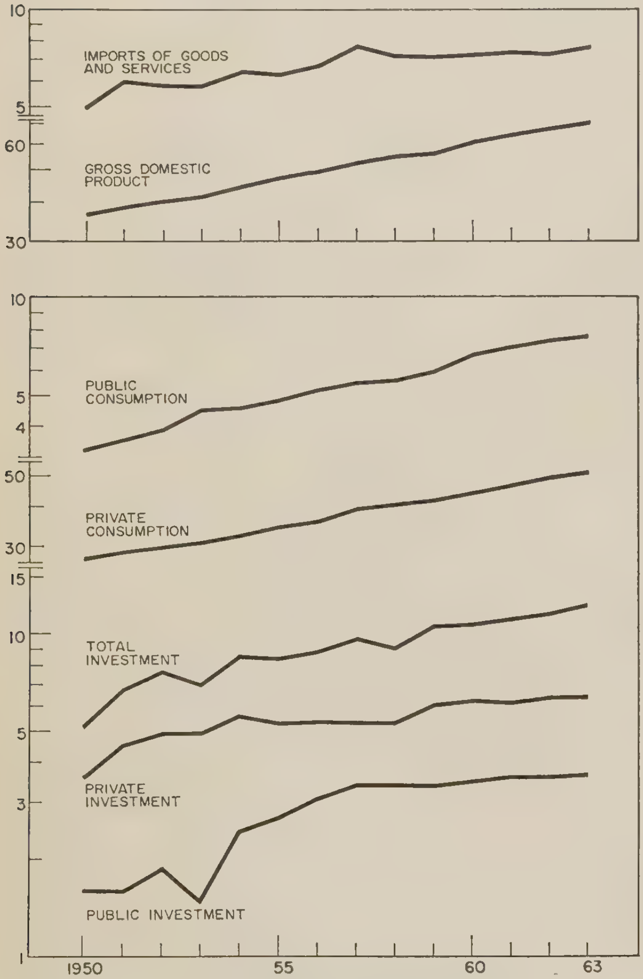
statistical estimates of fixed investment coefficients in the public and private sectors of a large number of countries, and gives the sum of such coefficients for geographical areas comprising different groups of countries.

From this table it appears that the gross fixed investment coefficient has tended to decline in Brazil, Colombia and Venezuela in recent years. In Brazil, the decline coincided with a drastic reduction in the growth rate, particularly in 1963, severe balance-of-payments problems and accelerated inflation; a salient factor in Colombia towards 1963 was undoubtedly the contraction in public investment, and, in Venezuela, the decline of investment in the petroleum sector, and after 1958 in the public sector played an important part. The investment coefficient also fell in Argentina in 1963. In earlier years gross capital formation had reached such high levels in that country that in 1961 private investment alone represented a coefficient of 18.7 per cent with respect to the over-all gross domestic product. In 1963 this coefficient was still 16.0 per cent, but the total investment coefficient had dropped to 21.4 per cent from a level of 23.8 per cent in 1961. The decline in the volume of investment was even more pronounced, since the reduction in the coefficient took place during a recession in the Argentine economy, which caused the domestic product to shrink considerably.

Figure VII. Latin America (excluding Argentina): Product, consumption, investment and external sector, 1950–63

(Thousands of millions of 1960 dollars)

Semi-logarithmic scale



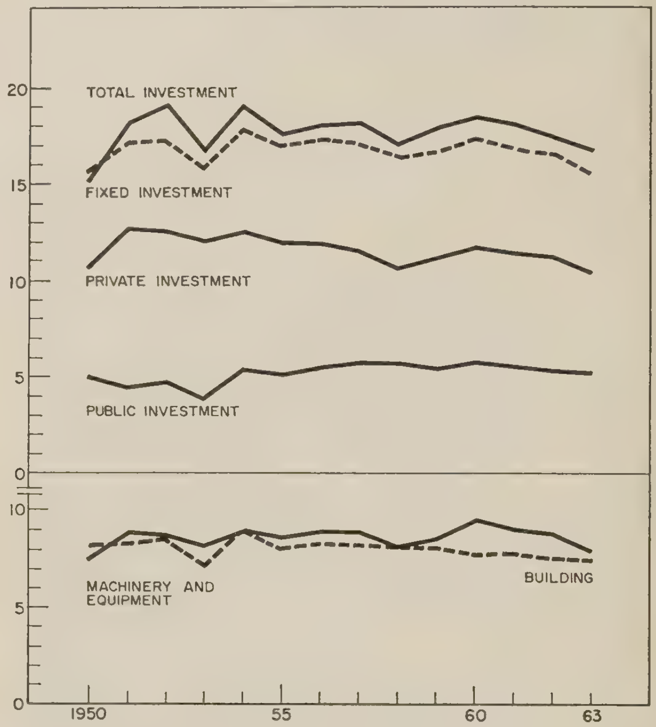
Source: ECLA, on the basis of official statistics.

As regards the other countries specified in table 10, special note should be taken of the behaviour of the investment coefficient in Chile and in the Central American group. In Chile the coefficient rose from an average of 9.7 per cent in the second half of the fifties to 12.1 per cent in 1960–63, thanks to the efforts made by both private and public investment. In Central America as a whole, the investment coefficient fell in the late fifties and remained at a low level up to 1961, that is, throughout the period of slower growth in these countries. In 1962 and 1963, however, the coefficient tended to rise in conjunction with the improvement in the growth rate.

Figure VIII. Latin America: Investment coefficient, 1950–63

(As a percentage of the gross domestic product)

Natural scale



Source: ECLA, on the basis of official statistics.

Over the long term, public investment in Latin America has increased more rapidly than private investment, a trend which has already been considered in relation to the dynamic components of final demand examined in an earlier section of this study. In fact, during the first half of the fifties public investment in Latin America as a whole represented 28 per cent of total gross fixed investment; in the second half its proportion rose to 32 per cent, and has remained the same for the last four years (see table 11).

Countries in which the growth of public investment outpaced that of private investment were Mexico and the Central American group, and Chile after 1955. The reverse was true of Argentina and Venezuela, although the trend did not follow a uniform pattern throughout the whole of the period from 1950 onwards. In Argentina, for example, public investment accounted for 22 per cent of the total in 1960–63 as against 28 per cent in the first half of the fifties. Conversely, in Venezuela, public investment reached its highest proportions in the second half of the fifties.

Table 10. Latin America: Fixed, public and private investment coefficients

(*Percentage of the gross domestic product*)

Country or area	*1950–54*	*1955–59*	*1960–63*[a]	*1960*	*1961*	*1962*[a]	*1963*[a]
Argentina							
Gross fixed investment	18.2	18.1	23.1	23.0	23.8	24.1	21.4
(*a*) Public	5.1	3.5	5.2	5.1	5.1	5.2	5.3
(*b*) Private	13.1	14.6	17.9	17.9	18.7	18.9	16.1
Brazil							
Gross fixed investment	14.9	14.2	13.1	14.9	13.8	12.9	11.0
(*a*) Public	4.1	4.6	5.0	5.7	5.3	5.1	4.2
(*b*) Private	10.8	9.6	8.1	9.2	8.5	7.8	6.9
Chile							
Gross fixed investment	9.4	9.7	12.1	10.3	12.9	12.6	12.6
(*a*) Public	4.5	4.1	5.6	4.1	5.9	6.2	6.1
(*b*) Private	4.9	5.6	6.5	6.2	7.0	6.4	6.5
Colombia							
Gross fixed investment	21.1	19.7	18.2[b]	18.3	18.8	17.5	...
(*a*) Public	3.4	4.0	3.6	3.1	4.0	3.6	...
(*b*) Private	17.7	15.7	14.6	15.2	14.8	13.9	...
Venezuela							
Gross fixed investment	27.4	24.5	17.9	19.0	16.3	17.2	18.9
(*a*) Public	9.7	11.2	6.5	9.2	6.7	5.2	4.9
(*b*) Private	17.7	13.3	11.4	9.8	9.6	12.0	14.0
Mexico							
Gross fixed investment	13.4	16.3	15.9	16.5	16.0	15.2	16.1
(*a*) Public	5.0	8.4	6.6	7.0	7.9	7.5	8.1
(*b*) Private	8.4	7.9	8.3	9.5	8.1	7.7	8.0
Central America							
Gross fixed invesment	13.7	15.4	14.0[b]	13.6	12.6	13.0	...
(*a*) Public	2.7	3.7	4.1[b]	2.9	3.1	3.4	...
(*b*) Private	11.0	11.7	9.9[b]	10.7	9.5	9.6	...
TOTAL, *Latin America (excluding Cuba)*							
Gross fixed investment	16.7	16.9	16.6	17.3	16.9	16.5	15.6
(*a*) Public	4.7	5.5	5.4	5.6	5.4	5.3	5.2
(*b*) Private	12.0	11.4	11.2	11.7	11.5	11.2	10.4
TOTAL, *Latin America (excluding Cuba and Venezuela)*							
Gross fixed investment	15.7	16.0	16.4	17.1	17.0	16.5	15.2
(*a*) Public	4.2	4.8	6.3	5.2	5.4	5.3	5.2
(*b*) Private	11.5	11.2	10.1	11.9	11.6	11.2	10.0
TOTAL, *Latin America (excluding Argentina, Cuba and Venezuela)*							
Gross fixed investment	14.8	15.3	14.5	15.2	14.9	14.3	13.6
(*a*) Public	3.8	5.3	5.3	5.1	5.4	5.3	5.2
(*b*) Private	11.0	10.0	9.2	10.1	9.5	9.0	8.4

SOURCE: ECLA, on the basis of official statistics.

[a] Provisional figures.

[b] 1960–62. The figures for Central America correspond to Costa Rica, Guatemala and Nicaragua.

Tables 12, 13 and 14 present the results of a statistical analysis of the trends followed by the two major components of gross fixed investment: machinery and equipment on the one hand, and building on the other. The latter covers both public construction and all types of private building.

The most salient feature over the long term is the practically unvarying relationship between these two elements of gross fixed investment, particularly during the fifties. At that time building was absorbing a slightly lower proportion of investment than machinery and equipment. In relation to the domestic product, the coefficient of the former was approximately 8.2 per cent and of the latter about 8.3 per cent. In the last few years of the fifties (see again figure VIII) the share of investment in machinery and equipment increased, and in 1960 was as much as 9.5 per cent of the gross domestic product.

Table 11. Latin America: Public and private investment

(*Percentage of gross fixed investment*)

Country or area	*1950–54*	*1955–59*	*1960–63*[a]	*1960*	*1961*	*1962*[a]	*1963*[a]
Argentina							
(*a*) Public	28.3	19.7	22.4	22.5	21.3	21.5	24.7
(*b*) Private	71.7	80.3	77.6	77.5	78.7	78.5	75.3
Mexico							
(*a*) Public	36.9	51.3	47.8	42.2	49.3	49.7	49.9
(*b*) Private	63.1	48.7	52.2	57.8	50.7	50.3	50.1
Chile							
(*a*) Public	48.0	42.3	46.3	39.9	45.9	49.0	48.6
(*b*) Private	52.0	57.7	53.7	60.1	54.1	51.0	51.4
Venezuela							
(*a*) Public	35.3	45.5	35.9	48.6	40.9	30.2	25.8
(*b*) Private	64.7	54.5	64.1	51.4	59.1	69.8	74.2
Central America							
(*a*) Public	19.4	24.3	24.1[b]	21.2	25.0	26.1	...
(*b*) Private	80.6	75.7	75.9[b]	78.8	75.0	73.9	...
TOTAL, *Latin America (excluding Cuba)*							
(*a*) Public	27.9	32.4	32.4	32.2	32.3	32.0	33.4
(*b*) Private	72.1	67.6	67.6	67.8	67.7	68.0	66.6
TOTAL, *Latin America (excluding Cuba and Venezuela)*							
(*a*) Public	26.7	30.2	32.0	30.2	31.4	32.2	34.4
(*b*) Private	73.3	69.8	68.0	69.8	68.6	67.8	65.6
TOTAL, *Latin America (excluding Argentina, Cuba and Venezuela)*							
(*a*) Public	26.0	34.3	36.5	33.7	36.4	37.3	38.4
(*b*) Private	74.0	65.7	63.5	66.3	63.6	62.7	61.6

SOURCE: ECLA, on the basis of official statistics.

[a] Provisional figures.

[b] 1960–62. The figures for Costa Rica, Guatemala and Nicaragua include changes in inventories.

Broadly speaking, the reason for this change in the composition of capital formation was the decline in the share of public investment in Argentina and Venezuela, added to which less private building was undertaken in Argentina. Table 13 shows that in Argentina the share of building in total investment fell from 54 to 49 per cent during the fifties, and has dwindled even more (to 38 per cent) in the last few years, and in Venezuela dropped from 66 per cent in the fifties to an average of 60 per cent in 1960–63.

2. DOMESTIC PRODUCT BY MAJOR ECONOMIC SECTORS

The rate of growth of Latin America's over-all domestic product has declined in the last few years, as shown in the preceding sections. In 1961 it was 5.2 per cent more than in the preceding year, but in 1962 and 1963 it fell off to 3.5 and 2.0 per cent, respectively, thereby reducing *per capita* production in 1963.[8] An analysis will now be made of the trends followed by the components of the domestic product, broken down by major economic sectors, in order to show the part played by each sector in the decline of the growth rate and then to review the changes that have taken place in the region's production structure in recent years.

The growth rate of Latin America's agricultural production was intensified in 1961–62. This period witnessed annual increments of about 4.5 per cent which testify to a certain amount of dynamism in the sector's evolution, especially in comparison with the average annual rate of 2.5 per cent that prevailed during the second half of the fifties (see table 15).

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[8] These figures relate to the gross product at market prices, and differ from those of table 15 where the gross product is given at factor cost.

Table 12. Latin America: Composition of gross investment

(*Percentage of the gross domestic product*)

Year	*Total investment*	*Fixed investment*	*Machinery and equipment*	*Building*	*Public investment*	*Private investment*
1950	15.1	15.6	7.5	8.1	4.9	10.7
1951	18.0	17.1	8.8	8.3	4.5	12.6
1952	19.0	17.2	8.7	8.5	4.7	12.5
1953	16.8	15.8	8.3	7.5	3.8	12.0
1954	19.0	17.8	8.9	8.9	5.4	12.4
1955	17.6	17.0	8.6	8.4	5.1	11.9
1956	18.0	17.2	8.9	8.3	5.4	11.9
1957	18.1	17.1	8.8	8.3	5.6	11.5
1958	17.1	16.4	8.2	8.2	5.7	10.7
1959	17.9	16.6	8.5	8.1	5.4	11.2
1960	18.4	17.3	9.5	7.8	5.6	11.7
1961	18.0	16.9	9.1	7.8	5.5	11.4
1962[a]	17.4	16.5	8.9	7.6	5.3	11.2
1963[a]	16.8	15.6	8.0	7.5	5.2	10.4

SOURCE: ECLA, on the basis of official statistics.

[a] Provisional figures.

However, in 1963, partly because of disasters and adverse climatic conditions, agricultural production expanded very slowly, the increase being less than 2 per cent according to provisional figures. Argentina and Brazil were primarily responsible for this unfavourable evolution. In Argentina crop and livestock production has been virtually stagnant for some time, and has suffered from unfavourable weather conditions in the past few years. In Brazil frosts and fires reduced the coffee harvest by 25 per cent in 1963, and also affected production for the home market.

Table 13. Latin America: Share of building in gross fixed investment

Country or area	*1950–54*	*1955–59*	*1960–63*[a]	*1960*	*1961*	*1962*[a]	*1963*[a]
Argentina	54.3	48.7	38.2	38.6	37.8	36.8	39.5
Mexico	39.0	36.2	43.6	38.7	44.0	49.3	42.5
Chile	44.6	34.3	41.2	39.9	42.3	43.8	38.9
Venezuela	66.3	66.3	59.7	64.5	61.7	56.6	56.0
Central America	64.5	59.3	60.4[b]	60.1	60.6	60.4	...
TOTAL, Latin America (excluding Cuba)	49.4	48.9	46.5	45.1	46.0	46.3	48.4
TOTAL, Latin America (excluding Cuba and Venezuela)	46.8	46.1	44.6	42.7	44.4	45.1	46.0
TOTAL, Latin America (excluding Argentina, Cuba and Venezuela)	43.5	45.1	48.0	44.6	47.7	49.1	50.6

SOURCE: ECLA, on the basis of official statistics.

[a] Provisional figures.

[b] 1960–62.

In Central America, on the other hand, the growth of agricultural production was stepped up, especially in so far as export crops are concerned, and the sector as a whole registered an annual growth rate of 5.8 per cent in 1960–62, which was far higher than that obtaining in the fifties (see table 16). Peru's agricultural production expanded very rapidly in 1961 and 1962 (at an annual average of 10 per cent) and, despite a certain tendency to stagnate in 1963, is estimated to have increased by an average of 6.4 per cent annually in 1960–63. Chile has followed a downward trend on the whole from the mid-fifties to 1963.

Table 14. Latin America (excluding Cuba): Volume of gross fixed investment

(*Annual average in millions of 1960 dollars*)

Year or period	*Building*	*Machinery and equipment*	*Total*
1950–54	4,349	4,457	8,806
1955–59	5,583	5,826	11,409
1960–63	6,377	7,308	13,685
1960	6,030	7,346	13,376
1961	6,350	7,458	13,808
1962	6,462	7,498	13,960
1963	6,500	6,930	13,430

SOURCE: ECLA, on the basis of official statistics.

Mining and quarrying activities, which constitute the mining sector in table 15, continued to expand at a relatively high rate up to 1962. In 1963, however, the rate fell to 2.7 per cent under the effect of the decrease in Argentina's output and slower growth in Venezuela. It should be noted that the decline in Argentina followed upon a period of intensive petroleum development which, in a short space of time, enabled a relatively large proportion of fuel imports to be replaced by domestic production.

Manufacturing industry expanded rapidly in 1961 (7.4 per cent), but later dropped so sharply that the 1963 production index for the region as a whole is estimated to have been only 1.4 per cent higher than in 1962. This decline is mainly attributable to Argentina, where industrial production shrank by 5.5 per cent annually in 1962–63, and to Brazil, where the growth rate of manufacturing industry fell from an annual average of 9 per cent in 1955–62 to only 2 per cent in 1963. These variations may, of course, alter considerably once final figures are to hand.

Table 15. Latin America: Evolution of the gross product by sectors[a]

	1950–55	1955–60	1960–63[b]	1961	1962	1963[b]
			A. *Latin America*[c]			
Agriculture	4.1	2.5	3.2	4.6	4.4	0.8
Mining	6.6	7.3	4.0	3.3	6.1	2.7
Industry	6.1	6.6	3.8	7.4	2.8	1.4
Building	4.8	3.8	1.6	4.0	1.3	−0.4
Transport and communications	5.7	4.4	3.7	6.0	2.9	2.3
Trade and finance	5.3	4.6	3.5	7.1	2.8	0.9
Government[b]	2.9	2.9	3.1	5.1	2.1	1.9
Other services	4.2	5.5	4.2	4.6	3.8	4.3
TOTAL	4.9	4.7	3.6	5.8	3.4	1.7
			B. *Latin America (excluding Argentina)*[c]			
Agriculture	4.1	3.1	4.1	5.9	5.1	1.3
Mining	6.6	6.9	3.4	1.5	5.5	3.3
Industry	7.3	8.0	6.0	7.4	6.7	3.9
Building	7.9	3.9	3.7	2.9	3.9	4.2
Transport and communications	6.9	5.2	5.6	6.0	5.6	5.1
Trade and finance	6.2	4.8	4.8	6.0	4.4	3.9
Government	3.3	3.2	4.3	6.7	3.7	2.6
Other services[b]	4.3	6.1	5.0	4.8	4.7	5.4
TOTAL	6.0	5.3	4.8	5.7	5.2	3.4

SOURCE: ECLA, on the basis of official statistics.

[a] Calculated on the basis of the gross domestic product at factor cost and 1960 prices.

[b] Provisional figures.

[c] No data available for Cuba or the Dominican Republic.

On the other hand, the growth of Central America's manufacturing output accelerated sufficiently for an increase of 10 per cent to be estimated for 1962 and much the same for 1963 (see again table 16). In Mexico, production, after falling off somewhat, has regained in the last two years the rates it used to enjoy in the past (6 and 8 per cent, respectively), in Colombia and Peru the relative increases in 1960–63 tended to exceed those of earlier years, and in Venezuela the relatively high annual rate of 6.6 per cent was recorded.

In the context of Latin America's sectoral economic evolution building is obviously the sector which has made the least progress in the last few years, since the decline in its rate of growth, which could already be discerned towards the end of the fifties, has become even more pronounced. During that decade its annual rate of growth dropped from 4.8 per cent in the first five years to 3.8 per cent in the second, and after 1960 has been even less than 1 per cent. The recent trend of building activities is all the more surprising in view of the relatively high level of external financing that has been maintained and the widespread housing development campaign in Latin America. In actual fact, the situation varied from one country to another, ranging from a contraction in Argentina and Brazil—which both weigh heavily in the over-all figures for the region—to very rapid rates of growth in other countries carrying less weight in the total. Among these are Chile, with an annual growth rate of 18 per cent in 1960–63, despite the decline experienced in 1963; Colombia, with a rate of 11 per cent annually in 1960–62, although to judge from the indicators available, it too, registered a drop in 1963; and Peru, which increased its activities in this sector by 14 per cent annually from 1960 onwards. Lastly, there is Venezuela, where building activities fell off after 1957, largely owing to the decline in public investment which had stood at very high levels in earlier years but began to recover in 1962, and, in 1963, are estimated to have achieved an increase of approximately 18 per cent.

Of the heterogeneous group of activities covered by the services sector, special consideration should be given to the evolution of the index for public utilities, i.e., electric energy, gas and water. The figures in table 16 indicate that the output of these services has expanded in the last few years, in some cases to a notable extent—partly as a result of an increase in public investment under the stimulus of external financing.

Owing to the variety of trends followed by the different economic sectors some changes have taken place in Latin America's production structure, although these are naturally not very noticeable over the short term, and are obscured by the heterogeneous nature of the economic sectors reviewed and the relatively broad groups with which the analytical plan is concerned.

On the whole, it may be said that the share of agricultural production in the formation of the total product is still diminishing. In 1960–63, the proportion accounted for by the region as a whole was 21 per cent, as against more than 23 per cent in the first half of the fifties (see table 17). On the other hand, the contributions of mining and manufacturing continued to increase. In 1963 these two sectors accounted respectively for 5.1 and 23.4 per cent of the over-all product compared with 4.5 and 21.3 per cent in 1955. Lastly, the share of building activities shrank from 3.4 per cent in 1955 to 3.0 per cent in 1963, as a result of the slow growth of the building industry in the last few years.

An analysis of individual countries also brings to light some important changes. In Argentina, the extractive industries contributed 2 per cent to the product in 1963 as against less than 1 per cent in the late fifties. In Chile building increased its share of the product from 2.4 per cent in 1960 to 3.4 per cent in 1963, whereas the proportional contributions of industry and agriculture contracted. In Brazil, Mexico and Peru it is the industrial sector that has continued to expand its share of the domestic product. Lastly, in Venezuela, the mining sector has reflected the relative weakening in the growth rate of petroleum production in recent years, since its share dwindled from 27.0 per cent in 1960 to 26.2 per cent in 1963, while the relative importance of industry has been accentuated.

Table 16. Latin America: Evolution of production in selected countries

(*Annual rate of growth of the gross domestic product, by sector*)

Sector	*Year or period*	*Argentina*	*Chile*[a]	*Colombia*	*Peru*	*Brazil*	*Mexico*	*Venezuela*	*Central*[b] *America*
1. Agriculture, livestock and fisheries	1950–55	4.1	1.4	2.7	2.1	5.0	5.8	5.9	2.1
	1955–60	0.4	0.9	3.5	3.9	3.5	2.8	5.9	2.9
	1960–63	−1.0	−1.5	3.9[c]	6.4	4.8	3.1	4.8	5.8
	1961	−1.7	−4.2	4.3	10.1	8.4	2.8	2.1	2.9
	1962	0.6	−2.6	3.4	10.8	6.0	5.3	7.3	8.7
	1963[d]	−1.8	−2.0	...	−1.2	0.1	1.2	5.0	...
2. Mining and quarries	1950–55	7.8	−2.8	4.3	8.8	6.6	4.7	9.0	0.2
	1955–60	14.1	10.9	6.9	11.9	12.7	6.0	6.8	0.8
	1960–63	13.0	1.4	−3.5	2.5	12.9	3.7	3.4	13.7
	1961	32.4	−1.7	−6.5	6.4	18.8	5.0	0.4	27.0
	1962	13.7	7.6	−0.4	−5.3	2.1	1.7	8.7	1.9
	1963[d]	−4.1	−1.5	...	6.9	18.5	4.7	1.5	...
3. Manufacturing industry	1950–55	3.8	4.3	6.9	7.8	8.1	6.6	11.7	6.0
	1955–60	3.6	2.2	6.1	6.1	10.3	8.1	7.7	4.8
	1960–63	−1.7	1.9	6.4[c]	8.1	6.4	6.0	6.6	8.1
	1961	7.5	−2.5	5.9	10.0	11.1	3.6	3.8	6.0
	1962	−5.3	5.7	6.9	8.6	6.8	6.4	8.0	10.2
	1963[d]	−5.5	2.5	...	5.6	1.9	8.2	8.7	...
4. Building	1950–55	1.5	2.6	12.4	10.6	6.4	6.4	10.5	7.6
	1955–60	3.6	2.9	−0.2	−2.1	6.9	8.1	1.2	−2.5
	1960–63	−4.4	17.1	11.0[c]	14.3	−7.8	4.4	−1.8	4.0
	1961	7.1	52.0	13.5	17.9	5.8	1.0	−24.0	0.7
	1962	−6.5	12.2	8.5	18.5	−5.6	1.0	5.4	7.5
	1963[d]	−13.8	−6.3	...	7.0	−7.7	11.5	18.4	...
5. Electric energy, gas and water	1950–55	6.2	6.4	9.6	—	4.4	9.6	18.1	10.8
	1955–60	6.3	5.8	11.7	—	10.5	9.0	18.2	12.9
	1960–63	12.3	6.0	10.1[c]	—	11.0	8.7	13.9	7.7
	1961	20.5	1.3	1.2	—	9.5	9.4	13.6	7.4
	1962	11.2	15.2	19.7	—	4.6	6.4	16.7	8.0
	1963[d]	5.6	2.0	...	—	19.5	10.3	11.5	...

SOURCE: ECLA, on the basis of official statistics.

[a] Calculations made on the basis of the gross domestic product at constant prices, and published in June 1964 by the Chilean Development Corporation (CORFO), for 1960–63. The same source was used for previous years, but the series are not strictly comparable.

[b] Rates for 1950–57, 1957–60 and 1960–63, respectively. The figures for electric energy, gas and water exclude Costa Rica.

[c] 1960–62.

[d] Provisional figures.

Table 17. Latin America: Changes in the sectoral composition of the domestic product in selected countries

(Percentage of the over-all gross product)

Country or area	*Agriculture, livestock, hunting and fisheries*	*Mining and quarries*	*Manufacturing industry*	*Building*	*Transport and communications*	*Trade and finance*	*Government*	*Other services*	*Total*
Latin America[a]									
1950	24.6	4.2	20.1	3.4	6.7	18.2	6.6	16.2	100.0
1955	23.6	4.5	21.3	3.4	7.0	18.5	6.0	15.7	100.0
1960	21.3	5.1	23.3	3.2	6.9	18.4	5.5	16.3	100.0
1963	21.0	5.1	23.4	3.0	6.9	18.4	5.4	16.6	100.0
Argentina									
1950	18.6	0.6	29.6	4.9	8.4	18.3	7.8	11.8	100.0
1955	19.4	0.8	30.6	3.9	8.3	17.8	7.4	11.8	100.0
1960	16.7	1.4	32.1	4.0	8.0	18.6	7.2	12.0	100.0
1963	16.7	2.0	31.5	3.6	7.7	18.5	7.3	12.3	100.0
Chile[b]									
1950	14.4	6.1	19.5	2.5	6.8	22.6	6.6	21.5	100.0
1955	13.9	4.8	21.8	2.6	7.4	25.7	6.7	17.1	100.0
1960	11.5	6.4	19.3	2.4	6.3	23.2	8.5	22.4	100.0
1963	9.4	5.9	18.2	3.4	7.6	27.0	8.1	20.4	100.0
Colombia									
1950	39.8	3.6	14.2	3.2	5.4	14.9	5.5	13.4	100.0
1955	35.2	3.5	15.4	4.5	6.9	16.3	5.7	12.5	100.0
1960	34.7	4.0	17.0	3.5	6.4	15.3	5.6	13.5	100.0
1962	33.8	3.4	17.4	4.1	6.6	15.5	5.7	13.5	100.0
Peru									
1950	26.2	5.5	15.0	3.5	4.7	18.5	10.6	16.0	100.0
1955	22.6	6.5	17.0	4.5	5.6	20.0	9.0	14.8	100.0
1960	21.7	9.1	18.2	3.3	5.5	19.8	8.1	14.3	100.0
1963	21.5	8.0	18.9	4.0	5.5	20.7	8.1	13.3	100.0
Brazil									
1950	28.8	0.3	20.0	1.8	7.4	16.4	7.2	18.1	100.0
1955	28.0	0.4	22.6	1.9	7.9	16.8	6.2	16.2	100.0
1960	24.8	0.5	27.5	2.0	8.5	16.8	5.2	14.7	100.0
1963	24.9	0.6	29.0	1.5	9.2	16.3	4.9	13.6	100.0
Mexico									
1950	23.9	5.9	19.3	3.2	4.9	25.3	3.4	14.1	100.0
1955	23.5	5.5	19.7	3.2	5.2	24.9	3.1	14.9	100.0
1960	20.1	5.5	21.7	3.6	5.0	25.0	2.9	16.2	100.0
1963	19.2	5.3	22.5	3.5	4.6	25.2	3.0	16.7	100.0
Venezuela									
1950	8.4	26.3	9.4	4.8	5.9	11.6	6.5	27.9	100.0
1955	7.5	26.9	10.8	5.2	5.3	12.8	5.1	26.4	100.0
1960	7.2	27.0	11.3	4.0	4.2	12.4	3.5	30.4	100.0
1963	7.3	26.2	12.1	3.3	4.1	12.1	4.2	30.7	100.0
Central America									
1950	43.5	0.8	9.2	3.7	3.3	18.8	5.6	15.1	100.0
1955	39.0	0.6	10.0	4.3	3.9	19.8	6.6	15.8	100.0
1960	36.8	0.5	10.3	3.1	4.5	19.8	7.9	17.9	100.0
1962	37.5	0.6	11.0	3.1	4.2	19.4	7.9	16.0	100.0

Source: ECLA, on the basis of official statistics.

[a] Based on figures that exclude Costa Rica, Cuba, the Dominican Republic and Guatemala.

[b] Calculations made on the basis of the figures for the gross domestic product at constant prices, and published in June 1964 by the Chilean Development Corporation (CORFO), for 1960–63. The same source was used for previous years, but the series are not strictly comparable.

Chapter II

THE EVOLUTION OF THE EXTERNAL SECTOR IN THE LATIN AMERICAN ECONOMY IN 1960–63

A. THE EVOLUTION OF THE EXTERNAL SECTOR AND ITS EFFECTS ON THE GROWTH RATE

1. RATE OF ECONOMIC GROWTH, EXPORTS, IMPORTS AND NET EXTERNAL FINANCING[1]

Table 18. **Latin America: Product, real income, consumption, investment and the external sector**

(*Millions of 1960 dollars*)

Year	*Gross product*	*Real income*	*Total investment*	*Total consumption*	*Volume of exports of goods and tourist income*		*Terms-of-trade effect with respect to 1960*	*Factor payments*	*Net external financing (balance of payments on current account)*	*Imports of goods and services (including tourist trade)*
					Total	*Goods*				
					A. *Latin America* (*excluding Cuba*)					
1950	48,254	49,661	7,270	41,051	5,923	5,512	1,407	978	−361	5,990
1955	61,688	62,711	10,834	51,200	6,895	6,305	1,023	1,096	419	7,241
1960	77,488	77,488	14,243	63,132	8,676	7,949	—	1,178	1,066	8,563
1961	81,610	81,678	14,672	66,871	8,972	8,206	68	1,330	1,196	8,905
1961	84,458	83,980	14,658	68,860	9,788	8,968	−478	1,393	931	8,848
1963[a]	86,150	85,852	14,470	70,224	10,137	9,267	−298	1,369	210	8,681
					B. *Latin America* (*excluding Argentina and Cuba*)					
1950	35,936	37,141	5,099	30,820	4,933	4,553	1,205	975	−247	4,916
1955	47,284	48,368	8,303	39,207	6,073	5,483	1,084	1,079	221	6,299
1960	61,064	61,064	10,375	50,429	7,593	6,870	—	1,121	861	7,333
1961	64,217	64,258	10,595	53,030	7,995	7,232	41	1,226	593	7,403
1962	67,640	67,285	10,741	55,879	8,428	7,617	−355	1,320	655	7,408
1963[a]	70,120	69,835	11,135	57,834	8,782	7,915	−285	1,296	430	7,631
					C. *Latin America* (*excluding Argentina, Cuba and Venezuela*)					
1950	32,244	33,062	4,303	28,083	3,747	3,336	818	445	−231	3,889
1955	41,678	42,330	7,020	35,136	4,314	3,727	652	406	232	4,792
1960	53,406	53,406	9,008	45,068	5,197	4,477	—	605	1,276	5,867
1961	56,419	56,367	9,380	47,389	5,583	4,824	−52	647	1,050	5,933
1962	59,348	59,099	9,393	50,145	5,826	5,019	−249	721	1,159	6,016
1963[a]	61,347	61,250	9,575	51,927	6,139	5,276	−97	725	977	6,294
					D. *Latin America* (*excluding Cuba and Venezuela*)					
1950	44,562	45,582	6,474	38,315	4,736	4,326	1,020	447	−346	4,963
1955	56,082	56,673	9,551	47,127	5,136	4,549	591	424	430	5,733
1960	69,820	69,820	12,876	57,762	6,280	5,556	—	662	1,481	7,098
1961	73,812	73,787	13,457	61,230	6,560	5,797	−25	751	1,652	7,435
1962	76,166	75,793	13,310	63,125	7,187	6,370	−373	793	1,435	7,456
1963[a]	77,377	77,267	12,910	64,316	7,495	6,628	−110	798	757	7,344

SOURCE: ECLA, on the basis of official statistics.

[a] Provisional figures.

In this section a more detailed examination will be made of the evolution of the external sector and of product and real income trends. As regards the external sector, a study will be made of the evolution of current income, the fluctuations in purchasing power, and the changes in the balance-of-payments position on current account, with the object of determining the net external financing used by the Latin American countries to achieve specific levels of imports. In this way, the analysis of export and import trends will be linked up with that of the economic growth rate. The study will refer first to the region as a whole and then concentrate on two groups of Latin American countries: one consisting of the whole region except for Venezuela, and the other excluding both Argentina and Venezuela. This kind of analysis is necessary because these two countries, which exert a powerful influence on the Latin American economy, have displayed a different pattern of behaviour from that of the other countries during the period covered by this study.

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[1] Throughout this sub-section, figures quoted in dollars should be understood to refer to 1960 values.

Table 19. **Latin America: Real income, consumption, investment and the external sector**

(*Percentage of the gross domestic product*)

Year	*Real income*	*Total investment*	*Total consumption*	*Volume of exports of goods and tourist income*	*Terms-of-trade effect with respect to 1960*	*Factor payments*	*Net external financing (balance of payments on current account)*	*Imports of goods and services (including tourist trade)*
			A. *Latin America, with respect to 1960 (excluding Cuba)*					
1950 . .	102.9	15.1	85.1	12.3	2.9	2.0	−0.7	12.4
1955 . .	101.7	17.6	83.0	11.2	1.7	1.8	0.7	11.7
1960 . .	100.0	18.4	81.5	11.2	—	1.5	1.4	11.1
1961 . .	100.1	18.0	81.9	11.0	+0.1	1.6	1.5	10.9
1962 . .	99.4	17.4	81.5	11.6	−0.6	5.6	1.1	10.5
1963[a] . .	99.7	16.8	81.5	11.8	−0.3	1.6	0.2	10.1
			B. *Latin America (excluding Argentina and Cuba)*					
1950 . .	103.4	14.2	85.8	13.7	3.4	2.7	−0.7	13.7
1955 . .	102.3	17.6	82.9	12.8	2.3	2.3	0.5	13.3
1960 . .	100.0	17.0	82.6	12.4	—	1.8	1.4	12.0
1961 . .	100.1	16.5	87.6	12.4	+0.1	1.9	0.9	11.5
1962 . .	99.5	15.9	82.6	12.5	−0.5	2.0	1.0	11.0
1963[a] . .	99.6	15.9	82.5	12.5	−0.4	1.8	0.6	10.9
			C. *Latin America (excluding Argentina, Cuba and Venezuela)*					
1950 . .	102.6	13.4	87.1	11.6	2.5	1.4	−0.7	12.1
1955 . .	101.6	16.8	84.3	10.4	1.6	1.0	0.6	11.5
1960 . .	100.0	16.9	84.4	9.7	—	1.1	2.4	11.0
1961 . .	99.9	16.6	84.0	9.9	−0.1	1.1	1.9	10.5
1962 . .	99.6	15.8	84.5	9.8	−0.4	1.2	2.0	10.1
1963[a] . .	99.8	15.6	84.6	10.0	−0.2	1.2	1.6	10.3
			D. *Latin America (excluding Cuba and Venezuela)*					
1950 . .	102.3	14.5	86.0	10.6	2.3	1.0	−0.8	11.1
1955 . .	101.1	17.0	84.0	9.2	1.1	0.8	0.8	10.2
1960 . .	100.0	18.4	82.7	9.0	—	0.9	2.1	10.2
1961 . .	100.0	18.2	82.9	8.9	—	1.0	2.3	10.1
1962 . .	99.5	17.5	82.9	9.4	−0.5	1.0	1.9	9.8
1963[a] . .	99.9	16.7	83.1	9.7	−0.1	1.0	1.0	9.5

SOURCE: ECLA, on the basis of official statistics.

[a] Provisional figures.

(a) *Latin America, excluding Cuba*

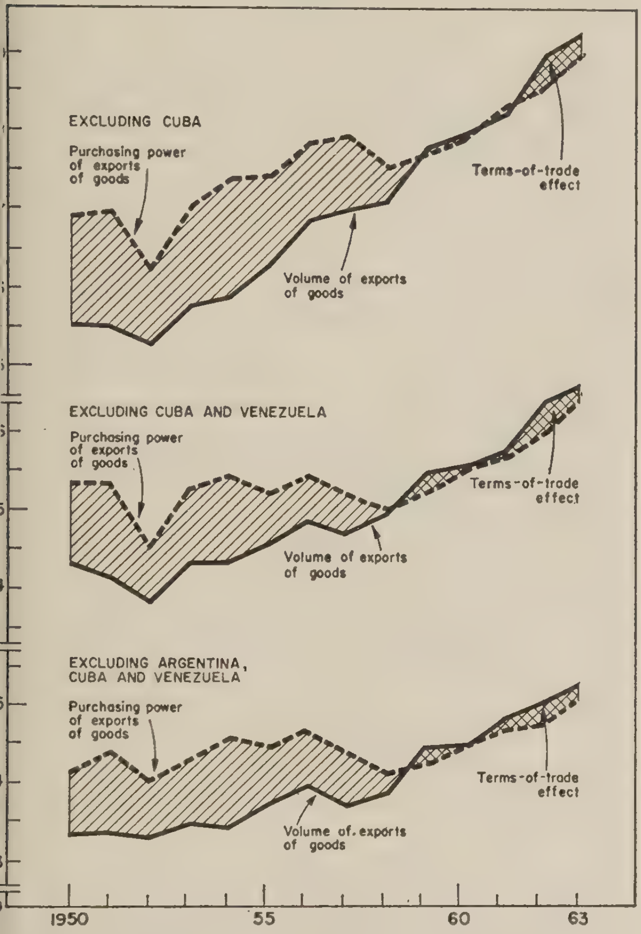
The aggregate volume of the region's exports of goods and tourist income increased rapidly from 1960 onwards. Their value, expressed in constant 1960 dollars, rose from 8,680 million dollars in that year to 10,140 million in 1963; that is to say, at an average annual rate of 5.3 per cent. Hence, the expansion in the volume of these two elements, which had begun in the middle of the fifties, continued to be the prevailing trend for the region as a whole (see tables 18 and 19 and figures IX and X).

These figures include an estimate of the dollar value of the gross tourist income accruing to all the Latin American countries. It should be pointed out that these earnings rose rather more rapidly than the volume of exports of goods, and tended to be concentrated in one country, Mexico.

It is useful, therefore, to make a separate examination of the course taken by exports of goods. Table 18 shows that their volume rose from 7,950 million dollars in 1960 to 9,270 million in 1963, which signifies an average rate of expansion of 5.2 per cent per year, a slightly higher figure than that recorded for the second half of the fifties (see again figure IX).

However, this rapid expansion in the volume of exports and tourist income coincided with a deterioration in the external terms of trade. Thus, if the already very depressed terms of trade in 1960 are taken as a basis of comparison, the effect of their deterioration may be calculated as representing 3.9 per cent of exports of goods and tourist income during the years 1962–63 (see table 30 later). The effect is even more marked in relation to the external terms of trade that prevailed prior to their slump from the mid-fifties onwards. If the basis of comparison is Latin America's external terms of trade in 1950–54, the effect of the deterioration would represent, in 1962–63, a loss of purchasing power amounting to nearly one fourth the volume of exports of goods and ourist income in those years. These trade losses repre-ent 3 per cent of the domestic product, and would be ver 0.4 per cent even if the already very depressed index or the year 1960 were taken as a benchmark.

igure IX. Latin America: Evolution of exports of goods and of their purchasing power, 1950–63
(Thousands of millions of 1960 dollars)
Natural scale

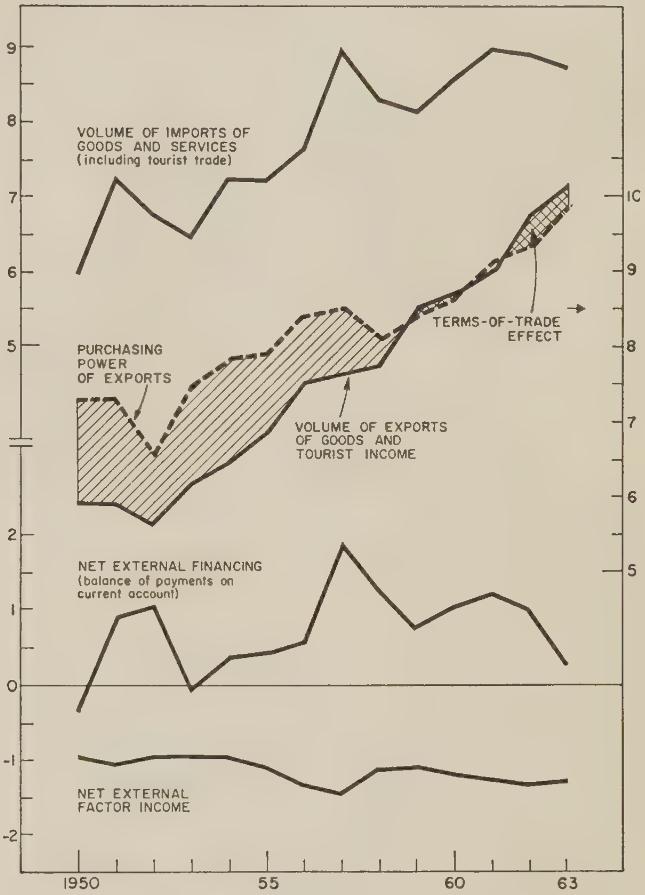


Sources: ECLA, on the basis of official foreign trade statistics nd IMF publications.

Consequently, the deterioration suffered by Latin merica in its external terms of trade offset much of the ncreased purchasing power that the region would have cquired as a result of the increase in the volume of xternal demand. In fact, although the comparison is nade with 1960, statistical estimates show that the value f exports and tourist income, in terms of purchasing ower, rose from 8,680 million dollars in 1960 to 9,840 nillion in 1963. In other words, the volume of exports f goods and tourist income expanded between 1960 and 963 by some 1,460 million dollars, whereas purchasing ower rose by 1,160 million; this means that the deterior-tion in the external terms of trade wiped out slightly ver 20 per cent of the increase in the volume of exports f goods and tourist income that was achieved between hose two years.

Hence, although the volume of exports and tourist ncome enjoyed a relatively rapid expansion of 5.3 per cent on an annual average, purchasing power rose at an average rate of 4.3 per cent yearly. Slower still was the increase in the purchasing power of current exports earnings, which averaged only 4.0 per cent annually, while the volume of exports of goods expanded by 5.2 per cent. This signifies that the external terms of trade suffered a relatively greater deterioration in respect of goods than of services. In fact, the volume of exports of goods in 1963 was 1,320 million dollars higher than in 1960, while their value, in terms of purchasing power, rose much less, i.e., by 1,000 million dollars; as a result the deterioration that took place in the external terms of trade during the short interval between 1960 and 1963 nullified nearly 24 per cent of the increase in the volume of exports.

Figure X. Latin America: Evolution of the external sector, 1950–63
(Thousands of millions of 1960 dollars)
Natural scale



Sources: ECLA, on the basis of official foreign trade statistics and IMF publications.

In relation to the trend displayed by the purchasing power of exports of goods and tourist income, and with due allowance made for payments under the head of profits and interest in respect of foreign investment and loans, Latin America imported goods and services to the value of 8,560 million dollars in 1960 and some 8,900 million dollars in 1961, which subsequently became 8,680 million in 1963. These purchases signified an excess of expenditure over current income, as indicated by the balance for transactions on current account, which reached 1,070 million dollars in 1960, rose to 1,200 million in 1961, and subsequently declined in 1963 to only 210 million dollars. These balances were equivalent to the net inflow of capital of every kind plus the net variations in monetary reserves, which will be considered later. What should be emphasized at this point for the purposes of the analysis is that the product for Latin America as a whole expanded during 1961, in company with imports, and continued to increase in the next two years, though very slowly, notwithstanding a decline in imports. The import coefficient fell from 11.1 in 1960 to 10.9 in 1961, and again to 10.1 in 1963, thereby reflecting the process of substitution and the measures taken to limit imports to which reference has already been made. It should be stressed that, whereas Latin America slashed its imports to the extent indicated above, the coefficient for the relationship between the volume of exports and tourist income, on the one hand, and the product, on the other, underwent an equally significant increase, from 11.2 in 1960 to 11.8 in 1963. The greater relative expansion in the volume of external demand was, however, unable to prevent considerable balance-of-payments deficits from occurring as a result of the deterioration in the external terms of trade and the increasing incidence of external factor payments. It was not until 1963 that an increase in the purchasing power of exports of goods and the tourist trade helped to reduce the deficits, although the basis was a contraction in imports which accentuated the sharp fall in the growth rate that is reflected in the product and income series for the region as a whole.

Figure X clearly illustrates the trends manifested by the various components of the external sector. It shows that the deterioration in the external terms of trade continued although less intensively over the last two years. It also shows that the ensuing trade losses are even greater if 1950–54 is taken as the benchmark period, because the general picture is then influenced by the deterioration in the external terms of trade that took place in the second half of the fifties (see table 30 later).

Figure X also reveals the decline in imports after 1961, and shows that, for the first time in many years, Latin America's consolidated foreign trade accounts indicate no more than a small excess of expenditure over income for current transactions.

Venezuela exercises a powerful influence over the development of the external sector in the region as a whole. It is best, therefore, to exclude Venezuela from the analysis, in order to see the evolution of the external sector in the remaining Latin American countries.

(b) *Latin America, excluding Cuba and Venezuela*

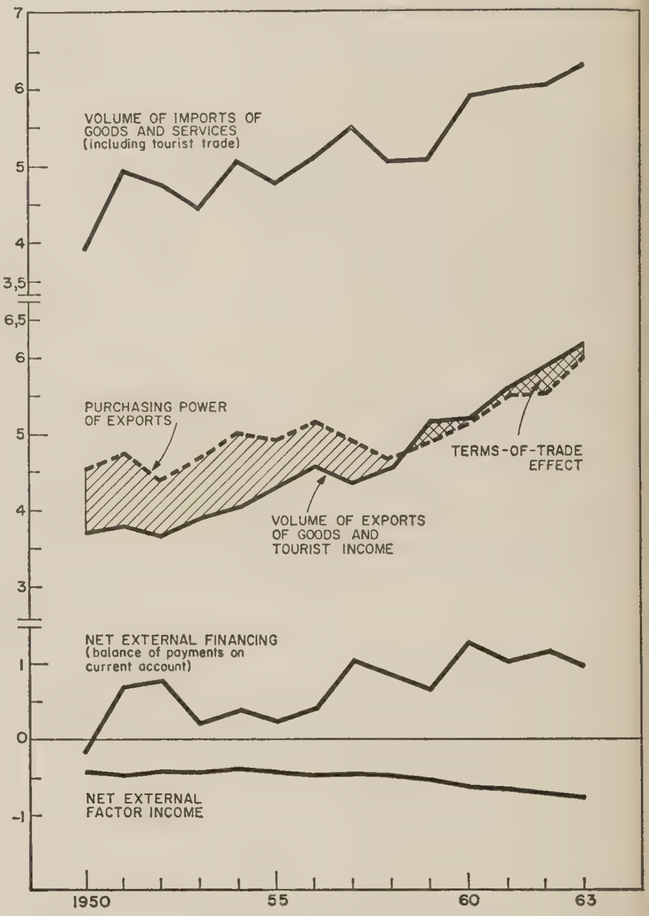
Figure XI, which plots the trends of the various components of the external sector in this group of countries, brings to light certain distinctive aspects of their evolution in relation to the observations made on Latin America as a whole. These aspects are connected essentially with the recent development of exports, imports and external financing in this group of countries.

The volume of exports of goods and tourist income shows a rapid expansion for this group of countries from 1960 onwards. Their value, in terms of purchasing power, has also increased in the last few years, thereby keeping more closely in line with the upward trend of exports, owing to the fact that the deterioration in the external terms of trade was more pronounced in Venezuela than in the rest of Latin America. Imports rose very considerably after 1959 and remained at a high level, although they tended to fall around 1962–63; on the other hand, the level of imports for Latin America as a whole has been comparatively stagnant in comparison with their level in 1957 by reason of Venezuela's influence on the total figures. With Venezuela excluded, the remaining Latin American countries continued in 1963 to show a debit balance for current external transactions, which was equivalent in amount to the net inflow of capital with due allowance made for the variations in monetary reserves.

Figure XI. Latin America (excluding Venezuela): Evolution of the external sector, 1950–63

(THOUSANDS OF MILLIONS OF 1960 DOLLARS)

Natural scale



SOURCES: ECLA, on the basis of official foreign trade statistics and IMF publications.

The most significant figures relating to these trends are given below. The volume of exports of goods and tourist income rose from 6,280 million dollars in 1960 to some 7,500 million in 1963. This expansion implies an average growth rate of 6.1 per cent yearly (see again table 18), and shows that the volume of external demand in this group of countries was expanding at a more rapid rate than it had been since the middle of the fifties.

Gross tourist income, which is included in external demand, has a particular influence on its evolution and benefits Mexico above all. However, the volume of exports of goods has also expanded rapidly in recent years, in marked contrast to the slow rate of growth recorded in the early fifties (see again figure XI). The relevant data indicate that the quantum of exports of goods expanded from 1960 onwards at an average rate of 6.1 per cent yearly, which compares very favourably with the rate of 1.7 per cent recorded for the period 1950–58.

It has already been pointed out that the losses suffered by this group of countries as a result of the deterioration in the external terms of trade were less severe than for Venezuela. The effect of this deterioration is estimated as slightly over 3 per cent of exports of goods and tourist income in 1962–63 if the already very low terms of trade in 1960 are taken as a basis of comparison. The figure would be quadrupled to 20 per cent of exports of goods and tourist income during those two years if the average external terms of trade prevailing in 1950–54 were taken as a basis of comparison (see table 30 later).

In short, if the losses resulting from the deterioration in the terms of trade are discounted, the value of exports of goods and tourist income will be seen to have grown, in terms of purchasing power, from 6,280 million dollars in 1960 to 7,390 million in 1963, in other words, at an average rate of 5.6 per cent yearly. This evolution, although somewhat offset by the deterioration in the external terms of trade, is in sharp contrast to the trend of events in this group of countries during the fifties, since the purchasing power of income from exports of goods and the tourist trade grew very slowly up to 1958, and, in fact, remained stationary for several years (see again figure XI).

The purchasing power of exports of goods increased, between 1960 and 1963, at an average annual rate of growth of 5.1 per cent, compared with 6.1 per cent for the volume of exports.

In contrast to the variations in the purchasing power of exports of goods and the tourist trade, this group of countries stepped up its imports in 1960 to 7,100 million dollars, and again in 1961 to 7,440 million. They subsequently fell slightly to 7,340 million dollars in 1963. These import levels were achieved by intensive use of external financing on the part of the group. An average of 1,520 million dollars was obtained in the three years from 1960 to 1962, and the figure in 1963, although greatly reduced, was nevertheless about 760 million. It should be remarked that these figures for net external financing correspond exactly to the balances recorded for transactions on current account, and therefore reflect the net inflow of capital of every kind plus net variations in monetary reserves; consequently, they are not necessarily equivalent to foreign loans and investment. For instance, in 1963, loans and investment added up to more than 760 million dollars, because there were outflows of capital for other reasons during the same year and an increase in certain countries' monetary reserves.

The domestic product for this group of countries grew considerably in 1960 and 1961, when imports were rising, only to fall sharply in 1962 and 1963, when imports tended to decrease; as a result, the group's import coefficient dropped from 10.2 in 1960 to 9.5 in 1963.

The particular evolution of the Argentine economy in recent years has had a great influence in both qualitative and quantitative terms on the general trends that have just been described in the region as a whole excluding Venezuela. It is interesting, therefore, to examine, albeit in broad outline, the evolution of the group of countries that excludes Argentina, Cuba and Venezuela.

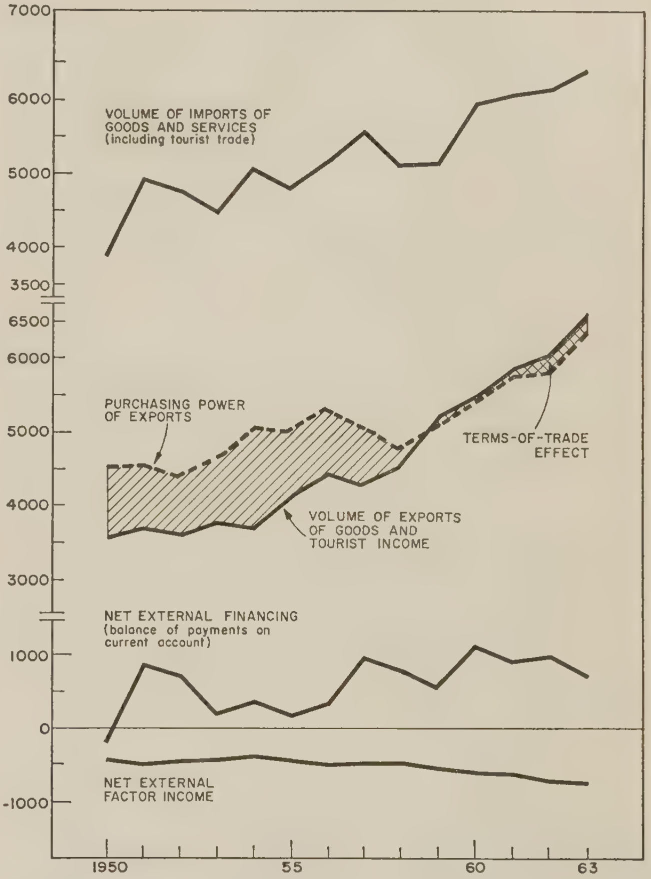
(c) *Latin America, excluding Argentina, Cuba and Venezuela*

Figures IV, V, IX and XII give a general picture of the trends followed by the component parts of the external sector in this group of countries, and emphasize certain distinctive characteristics of the group as compared with the evolution of Latin America as a whole. These aspects chiefly concern the evolution of imports and external financing.

Figure XII. Latin America (excluding Argentina and Venezuela): Evolution of the external sector, 1950–63

(MILLIONS OF 1960 DOLLARS)

Natural scale



SOURCES: ECLA, on the basis of official foreign trade statistics and IMF publications.

From 1960 onwards this group has continued to increase its imports at a moderate rate and to maintain external financing at a comparatively high level, whereas, as has been pointed out above, Latin America as a whole cut down its imports around 1962 and 1963, and in 1963 also managed to make a drastic reduction in its balance-of-payments deficit. This demonstrates the influence exercised on the total by Argentina and Venezuela, which reduced their imports and also showed relatively large surpluses for their foreign trade transactions, especially in 1963. It should also be pointed out that Venezuela has had a credit balance for its current transactions every year since 1960, and a very considerable net outflow of capital, and that the net inflow of capital fell sharply in Argentina in the past two years.

To sum up the situation in this group of countries, it may be said that the volume of exports of goods and tourist income expanded annually between 1960 and 1963 at a fairly high rate estimated to have averaged 5.7 per cent, and increased in absolute terms from 5,200 million dollars to some 6,140 million. Even with tourist income excluded, the growth rate of exports of goods was also rapid (5.6 per cent annually), whereas it had remained practically stationary for many years during the fifties (see again figure IX).

The additional losses occasioned by the deterioration in the external terms of trade have been relatively small in recent years, representing, on an average, about 3.0 per cent of the total volume of exports of goods and tourist income in 1962–63 if 1960 is taken as the benchmark year; if, however, the average for the period 1950–54 is taken as the base the losses represent as much as 21 per cent. If the losses are not taken into account, the purchasing power of exports of goods and the tourist trade increased at a rate of 5.2 per cent annually and exports of goods at 4.8 per cent.

As for net external financing, as represented by the closing figures on the balance of payments, it constituted between 1.5 and 2.4 per cent of the domestic product in 1960–63. Imports were thus able to rise from 5,900 million dollars in 1960 to 6,300 million in 1963.

In this group of countries, the domestic product continued to expand in 1960–63 at an average rate of 4.7 per cent annually. If this trend is compared with that of imports, it will be seen that the import coefficient, although shading downwards, was relatively stable from 1961 to 1963. It thus reflects the particular economic development of this group of countries, since in the region as a whole (including Argentina and Venezuela) this coefficient, far from remaining stable, fell fairly sharply.

2. EVOLUTION OF TOTAL EXTERNAL PURCHASING POWER

In the preceding section, the evolution of the external sector was examined, with the object of emphasizing the interrelations between external demand, net external financing, imports and economic growth. It was decided that for the purposes of such an analysis, the most adequate form of measurement would be values at constant prices.

This section will deal with the evolution of the total purchasing power of the Latin American countries in terms of current income and the net inflow of autonomous capital, and will determine to what extent their purchasing power was used for importing. It will finally review the utilization of monetary reserves and of various forms of compensatory financing. The figures expressed in current dollars in the balance of payments will suffice for the purposes of the analysis.

As regards the method of analysis, it may be useful to recall the scope of the term "total external purchasing power" as used in this section, and already introduced by the ECLA secretariat in other documents. Total external purchasing power is calculated by adding together income from exports of goods and services and the net inflow of autonomous capital, and then subtracting interest and profits in respect of foreign investment and loans and the amortization of deferred import payments and of balance-of-payments loans.

The resulting figure, with due allowance made for errors and omissions, is the total purchasing power generated in a given period and capable of being used for imports of goods and services. If the imports actually effected are less than purchasing power, the balance represents an accumulation of monetary reserves or foreign credits; if, however, they exceed purchasing power, the balance constitutes withdrawals from monetary reserves, balance-of-payments loans or suppliers' credits. It should also be remembered that the net movements of autonomous capital that are added to current income are composed of direct net investment, long-term loans, official donations and other movements of capital that are neither compensatory loans nor deferred import payments. With regard to capital transactions, it must be explained that the figures for errors and omissions given in the basic tables of this analysis may include unregistered movements of capital, although the magnitude of such movements cannot be determined for lack of information.

Here, as in previous sections, it would be useful to enter into a detailed analysis of different groups of countries in order to identify those that carry most weight in the aggregate figures and have had a different kind of evolution. However, as the main purpose of this chapter is to make an over-all evaluation, only two basic groups will be dealt with: first, the region as a whole, and, secondly, the region excluding Venezuela. The first factors to be discussed will be the evolution of total purchasing power, the trend of imports and the ensuing compensatory financial movements in the region as a whole.

(a) *Latin America, excluding Cuba*

Latin America's total purchasing power has tended to rise in the last few years—at a notably sluggish pace up to 1962 and very rapidly in 1963. Thus, from 8,500 million dollars in 1959 (see table 20), it climbed to 8,780 million in 1962, the increment achieved in those three years being very little to supply the import requirements deriving from a satisfactory rate of growth. In fact, the figure for 1962 is almost the same as Latin America's average purchasing power in 1956–60, namely, 8,775 million dollars. And the limitations imposed on Latin America's economic development by the lack of dynamism in the capacity to import become even more marked if the fact that the purchasing power of these figures in current dollars has recently been reduced by the gradual rise in the prices of manufactured products is also taken into account.

As a result of this evolution in total purchasing power, imports as a whole were severely restricted, their value in 1962 being 9,600 million dollars or only 4.8 per cent more than the annual current value of imports in 1956–60 an average of 9,160 million dollars). Nevertheless, in order to meet these relatively low import requirements, the region as a whole was obliged to draw heavily on balance-of-payments loans, suppliers' credits and monetary reserves. Utilization of funds under these heads rose from around 400 million dollars in 1956–60 to an average of over 700 million in 1961 and 1962.

Table 20. **Latin America: Total purchasing power and imports of goods and services**

(*Millions of current dollars*)

Annual average by periods	*Total purchasing power*								*Imports of goods and services*[c]	*Balance*[d]
	Exports			*Net autonomous capital movements*	*Net external factor income*	*Amortization of deferred import payments and balance-of-payments loans*	*Sub-total*	*Errors and omissions*	*Total purchasing power*		
	Goods[a]	*Services*[b]	*Total*								
					Total (excluding Cuba)						
1951–55 . .	7,078.8	852.6	7,931.4	511.7	−914.8	−127.1	7,401.2	−79.2	7,322.0	7,643.4	−321.4
1956–60 . .	7,950.9	1,295.5	9,246.4	1,293.7	−1,218.8	−172.3	9,149.0	−373.2	8,775.8	9,160.2	−384.4
1960 . .	7,967.3	1,484.4	9,451.7	857.0	−1,178.2	−186.2	8,944.3	−417.7	8,526.6	9,339.1	−812.5
1961 . .	8,156.5	1,498.2	9,654.7	1,073.9	−1,308.8	−205.5	9,214.3	−286.1	8,928.2	9,521.9	−593.7
1962[e] . .	8,596.4	1,480.7	10,077.1	580.6	−1,404.5	−163.6	9,089.6	−308.6	8,781.0	9,612.2	−831.2
1963[e] . .	9,162.5	1,550.3	10,712.8	765.0	—1,391.7	...	10,086.1[f]	−262.3	9,823.8[f]	9,524.1	+299.7
					Total (excluding Cuba and Venezuela)						
1951–55 . .	5,502.2	805,7	6,305.9	432.2	−438.7	−127.1	6,172.3	−25.4	6,146.9	6,501.5	−354.6
1956–60 . .	5,496.4	1,190.6	6,687.0	980.5	−545.2	−172.3	6,950.0	−135.0	6,815.0	7,173.3	−358.3
1960 . .	5,579.7	1,359.1	6,938.8	1,169.9	−661.8	−186.2	7,260.7	−5.7	7,255.0	7,757.5	−502.5
1961 . .	5,718.7	1,383.9	7,102.6	1,458.3	−741.3	−172.2	7,647.4	−229.7	7,417.7	7,984.7	−567.0
1962[e] . .	6,085.3	1,377.2	7,462.5	991.8	−799.0	−96.9	7,558.4	−282.5	7,275.9	8,112.2	−836.3
1963[e] . .	6,613.1	1,455.4	8,068.5	1,155.1	−798.1	...	8,425.5[f]	−272.2	8,153.3[f]	8,041.9	+111.4

SOURCE: ECLA, on the basis of data contained in the International Monetary Fund, *Balance of Payments Yearbook*, vols. 12, 13, 14 and 15.

[a] Including net non-monetary gold.

[b] Gross earnings from non-financial services.

[c] Including gross disbursements on non-financial services, and net private donations.

[d] This balance is equal and of an opposite sign to the sum of gross income in respect of deferred import payments, balance-of-payments loans and variations in net monetary reserves.

[e] Provisional figures.

[f] Amortization of deferred import payments has not been deducted.

In 1963 total purchasing power increased appreciably and, according to provisional estimates, came close to 9,800 million dollars, i.e., it was 9 per cent more than the average for the two preceding years—a period in which total purchasing power was some 9,000 million dollars—if amortization of loans and other sources of credit are not deducted, so that the figures are comparable. The expansion of total purchasing power did not lead to an increase in imports for Latin America as a whole in that year, because the region substantially reduced its net utilization of compensatory funds, and in some countries part of the additional purchasing power went to swell monetary reserves.

The upper part of figure XIII illustrates the evolution of the factors described above from 1950 onwards. It shows that from 1957 to 1962 the region as a whole drew extensively on compensatory funds to pay for its imports even though the ratio of these funds to the domestic product fell appreciably.

This figure also brings out the sizable increase in total purchasing power between 1955 and 1957 as a result of the heavy influx of autonomous capital, consisting for the most part of petroleum investment in Venezuela (see the lower part of figure XIII).

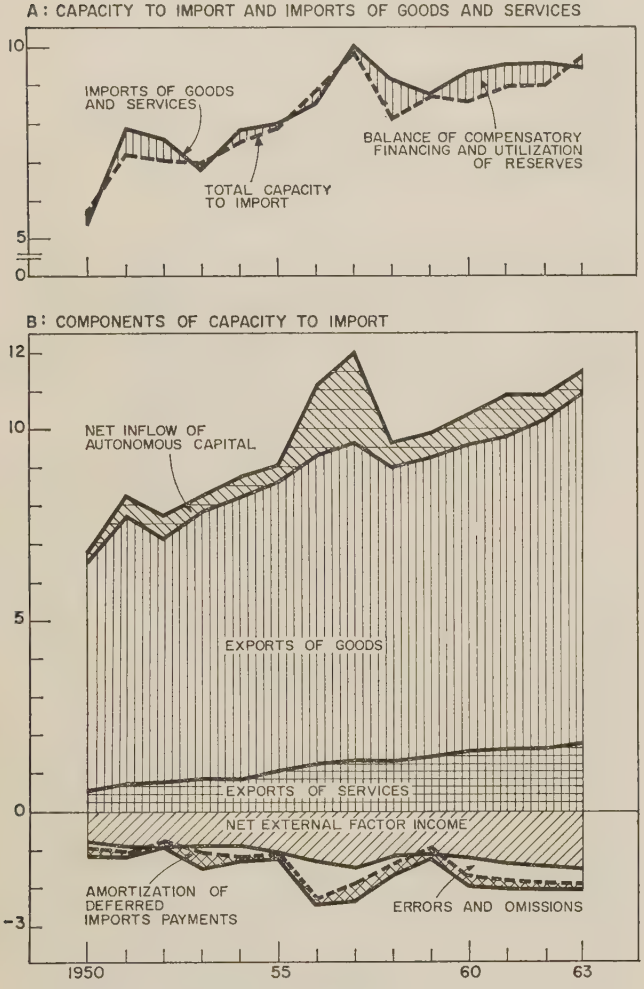
The next stage of the analysis consists in an examination of the trends followed by assets and liabilities in respect of purchasing power. In order to provide a better background against which to assess the change that took place in the evolution of accounts in 1963, this analysis will be limited to a study of the variations that emerge from a comparison of purchasing power accounts in 1963 with those in 1960. Table 21 assembles the pertinent information obtained by comparing the figures for those years which appear in table 20.

Between 1960 and 1963, the increase in total purchasing power (1,100 million dollars before deduction of amortization of balance-of-payments loans and suppliers' credits) was an exact reflection of the increase in income from exports of goods and services (1,195 million and 65 million dollars respectively), since net autonomous movements of capital decreased by 90 million dollars, chiefly because of a reduction in the influx of private investment.

On the other hand, the debit side of purchasing power, represented by payments of profits and interest in respect of foreign investment and loans, increased by 210 million dollars. It must be emphasized that this increase occurred at a time when the net inflow of autonomous capital was diminishing, and that its relative magnitude (18 per cent) was greater than that of income from exports of goods (15 per cent) and services (4 per cent). In such circumstances, liabilities of the kind described have a markedly limiting effect on purchasing power, for despite its improvement in 1963, the increase in liabilities absorbed nearly a quarter of the additional income from exports of goods.

In short, with errors and omissions taken into account, a rise of 1,110 million dollars in total purchasing power was set over against an increase of only 185 million dollars in imports of goods and services. The difference of 930 million represents the decline in the net utilization of compensatory loans, suppliers' credit and monetary reserves between 1960 and 1963. Complete statistical data are not yet available for assigning an exact figure to each of the items making up the total difference. It may, however, be pointed out that monetary reserves increased in certain countries and dwindled in others, while the fact that less use was made of compensatory financing may have been due to the amortization of loans, credits and deferred import payments, or to the introduction of import controls by some countries in an effort to avoid sinking any deeper into debt.

Figure XIII. Latin America: Imports, capacity to import and import components, 1950–63
(THOUSANDS OF MILLIONS OF DOLLARS)
Natural scale



SOURCE: ECLA, on the basis of IMF statistics.

(b) *Latin America, excluding Cuba and Venezuela*

Figure XIV illustrates the evolution of total purchasing power and of its components, and the way in which the imports of goods and services were financed in this group of countries. A comparison of this figure with its counterpart for the region as a whole brings out the highly individual nature of the trend followed by Venezuela's external sector, and the incidence of the figures for this country on the regional totals. The salient characteristic for the group of countries that excludes Cuba and Venezuela is that they did not have, around 1956 and 1957, the substantial increase in the net inflow of autonomous capital that was recorded for the region as a whole, since the bulk of the capital went to Venezuela. Consequently, total purchasing power in the former group tended to rise after 1960. Another interesting fact (see part B of figure XIV) is that the movement of autonomous capital signified a net inflow that increased consistently from the middle of the fifties onwards and was larger than the net inflow recorded for the region as a whole. Here, again, is another example of the distinctive behaviour pattern of the external sector in Venezuela, where, in recent years, the movement of autonomous capital has taken the form of a net outflow of funds.

Table 21. Latin America (excluding Cuba): Variations in the assets and liabilities of purchasing power, 1960–63

	Millions of dollars	*Percentage variation in the value of each item in 1960*
1. Export income and autonomous capital	+1,169.1	11.3
(*a*) Exports of goods . . .	+1,195.2	15.0
(*b*) Exports of services . . .	+65.9	4.4
(*c*) Autonomous capital movements .	−92.0	−10.7
2. *Less*: Transfers of net external factor income	+213.5	18.1
3. *Less*: Errors and omissions . .	−155.4	−37.2
4. Total purchasing power[a] . . .	+1,111.0	12.8
5. Variations in the net utilization of compensatory loans and monetary reserves	−926.0	...
6. Imports of goods and services . .	+185.0	2.0

SOURCE: ECLA, on the basis of IMF statistics.

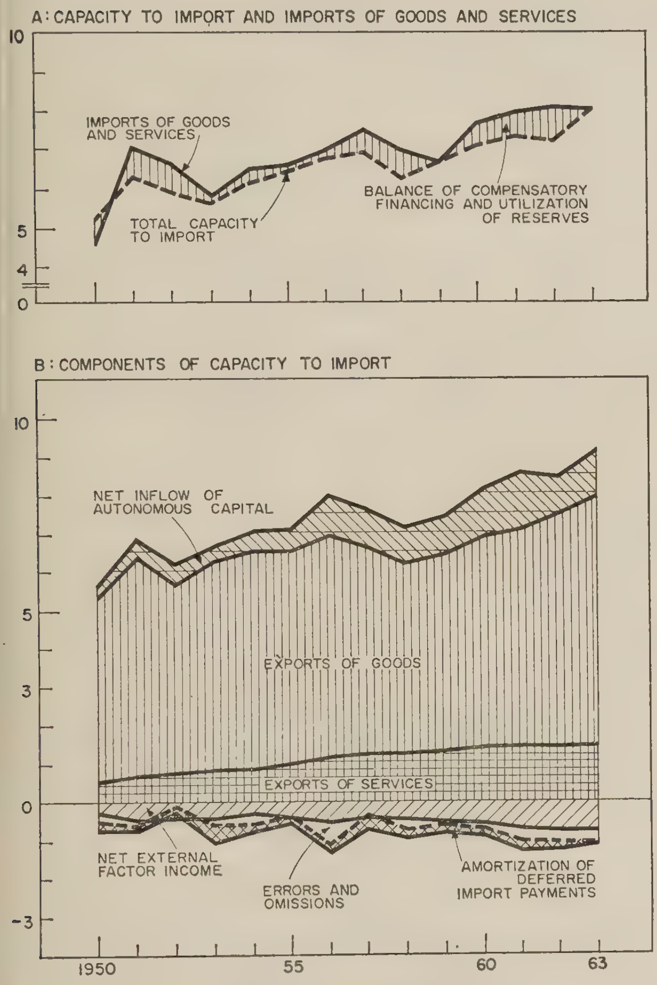
[a] Amortization of balance-of-payments loans and Suppliers' credit has not been deducted.

After these general observations on the different trends followed by the various components of purchasing power in this group of countries, a more leisurely analysis should be made of trends in the last few years, on which the pertinent information can be obtained from table 20.

The total purchasing power of this group of countries expanded fairly rapidly between 1959 and 1961, but fell in 1962; this evolution was the result both of the net inflow of autonomous capital and of income from exports of goods and services. In 1960, total purchasing power was 7,260 million dollars, and in 1962 7,280 million; that is to say, the total increment was negligible.

The value of imports of goods and services amounted in 1960 to 7,760 million dollars, and in 1962 to 8,110 million. The margin by which these figures exceeded total purchasing power (500 and 800 million dollars respectively) reflects the intensive use which these countries were obliged to make of compensatory loans, suppliers' credits and monetary reserves in order to pay for imports that were in general severely restricted. The comparative importance assumed by compensatory financing will be appreciated from the fact that in the second half of the fifties these sources supplied 360 million dollars as against 800 million in 1962.

Figure XIV. Latin America (excluding Venezuela): Imports, capacity to import and import components, 1950–63
(THOUSANDS OF MILLIONS OF DOLLARS)
Natural scale



SOURCE: ECLA, on the basis of IMF statistics.

As in the case of the region as a whole, the group of countries excluding Venezuela considerably expanded their total purchasing power in 1963. It rose in that year to 8,150 million dollars from 7,280 million in 1962 (before deductions for the servicing of loans and other compensatory financing). But, in spite of the increase in purchasing power, imports did not rise in 1963; on the contrary, they fell to some 8,040 million dollars, as compared with 8,110 million dollars in 1962. In 1963, the consolidated figures for this group of countries indicate that net utilization of compensatory funds and reserves diminished sufficiently to enable part of the increased purchasing power to be used to swell reserves or to amortize compensatory loans and make deferred import payments.

Information on the absolute and relative differences shown by these financial movements between 1960 and 1963 is given in table 22, which is based on the figures in table 20. The only difference is that amortization of deferred import payments, balance-of-payments loans, etc., has not been deducted from purchasing power, so that the data may be more strictly comparable.

This analysis shows that the increase in total purchasing power revealed by a comparison of the accounts for 1963 with those for 1960 (710 million dollars) was attributable to the expansion in current income from exports of goods (1,030 million dollars) and services (100 million), since the net inflow of autonomous capital in 1963 was 15 million dollars less than in 1960, although it increased by 200 million dollars in 1960 and by 300 million dollars in 1961.

Table 22. Latin America (excluding Cuba and Venezuela): Changes in assets and liabilities in respect of purchasing power, 1960–63

	Millions of dollars	*Percentage variation in the value of each item in 1960*
1. Export income and autonomous capital	1,114.9	13.7
(*a*) Exports of goods	1,033.4	18.5
(*b*) Exports of services	96.3	7.1
(*c*) Autonomous capital movements .	−14.8	−1.3
2. *Less*: Transfers of net external factor income	+136.3	20.6
3. *Less*: Errors and omissions . .	−266.5	377.5
4. Total purchasing power . . .	712.1	9.6
5. Imports of goods and services . .	+284.4	3.7
6. Variations in the net utilization of compensatory loans and monetary reserves	+427.7	...

Payments of dividends and interest on foreign investment and loans mounted by 140 million dollars. As a result they outstripped earnings from exports of goods, which rose by 16 per cent against 21 per cent for payments. For the purposes of the analysis it should be stressed again that the increase in these transfers of funds, which do not include amortization of capital, signified the absorption of 14 per cent of the group's current earnings from exports of goods.

It should also be pointed out that these countries' respective balances of payments showed a substantial increase in the adjustment for errors and omissions (270 million dollars). Lack of data makes it impossible to locate the errors and determine the magnitude of the omissions, but it may well be that the adjustment includes unregistered capital outflows that have also contributed to a certain extent to limit the total purchasing power of the group.

In conclusion, it may be stated that, against an addition of 710 million dollars to total purchasing power, imports of goods and services rose by 280 million, so that the difference of 430 million dollars represents a reduction in the utilization of net compensatory loans and net suppliers' credits, or an increase in monetary reserves. That is to say, that Latin America displays the same general characteristics, although in different degrees, whether the region is considered as a whole or whether Venezuela is excluded.

3. BALANCE OF PAYMENTS, CAPITAL INFLOWS AND THE EXTERNAL FINANCIAL SITUATION

The trends that will now be analysed relate to the different kinds of capital entering Latin America in the last few years, and some comments will be added on the magnitude of the region's external debt in terms of the burden cast on the balance of payments by the servicing of foreign investment and loans.

With a view to fitting this analysis into traditional methodological patterns, the first factor to be examined will be the evolution of the balance-of-payments position on current account, as indicated by the figures for external transactions expressed in current dollars.

Table 23. Latin America: Balance of payments

(Annual average in millions of dollars)

	1951–55	*1956–60*	*1960*	*1961*	*1962*[a]	*1963*[a]
Total (excluding Cuba)						
I. Current account						
(*a*) Current income	7,973.3	9,343.8	9,576.3	9,828.6	10,203.6	10,816.5
(*b*) Imports f.o.b.	−6,054.1	−7,018.8	−7,113.1	−7,343.1	−7,381.1	−7,325.2
(*c*) External factor payments[b]	−935.2	−1,262.2	−1,236.5	−1,400.5	−1,438.5	−1,421.3
(*d*) Other items[c]	−1,610.7	−2,195.4	−2,292.3	−2,261.0	−2,323.6	−2,273.0
Balance of current transactions	−626.7	−1,132.6	−1,065.6	−1,176.0	−939.6	−203.0
II. Net autonomous capital movements	511.7	1,293.7	857.0	1,073.9	580.6	765.0
III. Net compensatory capital movements	194.2	212.1	626.3	388.2	667.6	−299.7
IV. Errors and omissions	−79.2	−373.2	−417.7	−286.1	−308.6	−262.3
Total (excluding Cuba and Venezuela)						
I. Current account						
(*a*) Current income	6,340.7	6,766.5	7,047.0	7,246.5	7,568.6	8,157.7
(*b*) Imports f.o.b.	−5,198.8	−5,589.8	−5,972.9	−6,249.5	−6,321.9	−6,279.9
(*c*) External factor payments	−453.3	−574.3	−708.8	−817.2	−819.0	−813.2
(*d*) Other items	−1,322.8	−1,633.9	−1,845.8	−1,803.2	−1,876.4	−1,836.1
Balance of current transactions	−634.2	−1,031.5	−1,480.5	−1,623.4	−1,448.7	−771.5
II. Net autonomous capital movements	432.2	980.6	1,169.9	1,458.3	991.8	1,155.1
III. Net compensatory capital movements	227.4	186.0	316.3	394.8	739.4	−111.4
IV. Errors and omissions	−25.4	−135.1	−5.7	−229.7	−282.5	−272.2

SOURCE: International Monetary Fund, *Balance of Payments Yearbook*, vols. 12, 13, 14 and 15.

[a] Provisional figures for 1962 and estimates for 1963.

[b] Gross disbursements.

[c] Including outflows under the head of non-financial services and private donations.

The balance of payments for Latin America as a whole, which is the algebraic sum of each country's balance of payments, showed a growing deficit for current inflows and outflows throughout the fifties and up to 1961, as the study of external financing has already indicated. The deficit for the region as a whole was 970 million dollars in 1960 and over 1,000 million in 1961, but shrank to 760 million dollars in 1962 and virtually disappeared in the following year, according to the estimates available (see table 23).

If Venezuela is omitted from this over-all picture the figures become more representative of the general trend followed by the balance of payments in the Latin American countries, because, as explained before, the pattern of behaviour in Venezuela was distinct from that of the majority. In fact, with Venezuela excluded, the deficit rose in 1960 to 1,400 million dollars, and in 1961 to over 1,500 million; in 1962 it dropped to 1,270 million and to only 500 million in 1963.

These deficits were financed largely by net autonomous capital inflows, in the shape of new direct investment, re-investment of profits, net long-term loans, official donations and other movements of funds originating in the variations of long-term assets and short-term credits. But such financing also required balance-of-payments loans, suppliers' credits and the use of monetary reserves and led many countries to fall into trade arrears. In 1963, the position changed because the additional purchasing power acquired was not used by the region as a whole to increase imports but to reduce the net utilization of compensatory financing.

Table 24 shows the balance-of-payments position on current account of each of the Latin American countries. The individual country data indicate that the relative equilibrium achieved by the region as a whole in 1963 was determined by the surpluses recorded in Argentina and Venezuela. In Argentina the surplus was 224 million dollars and in Venezuela 570 million, thereby considerably adding to the credit balances enjoyed by this country since 1960.

If Argentina and Venezuela are excluded, the other Latin American countries as a whole present in 1963 a deficit of nearly 1,000 million dollars, which is slightly less than in the preceding year. Brazil's share of the deficit was 500 million dollars in 1962 and 250 million in 1963.

Table 24. Latin America: Balance-of-payments position on current account

(*Annual average in millions of dollars*)

Country	*1951–55*	*1956–60*	*1960*	*1961*	*1962*	*1963*[a]
Argentina	−140.4	−177.5	−204.9	−584.5	−272.8	+224.3
Bolivia	−13.9	−28.6	−32.9	−32.1	−48.0	−54.8
Brazil	−288.8	−299.4	−560.0	−304.0	−503.0	−248.0
Chile	−14.0	−83.2	−149.7	−279.8	−163.0	−251.5
Colombia	−24.5	+21.0	−84.5	−141.8	−134.0	−115.5
Costa Rica	−2.9	−17.8	−19.3	−17.8	−20.1	−33.2
Cuba[b]	−47.8	−87.0[c]	...	...	...	...
Dominican Republic	+2.8	+7.3	+42.7	+42.0	−3.6	−12.9
Ecuador	−4.3	−12.1	−16.8	−25.7	−15.5	−13.0
El Salvador	+6.7	−4.3	−28.4	−1.8	—	−10.5
Guatemala	+2.7	−36.2	−30.9	−28.5	−33.3	−4.6
Haiti	−5.2	+0.5	+2.5	−5.1	−1.9	+4.4
Honduras	−5.3	−6.4	+2.5	—	−6.5	−13.2
Mexico	−57.3	−218.6	−288.2	−192.9	−109.3	−119.1
Nicaragua	−1.4	−7.6	−10.2	−7.0	−12.8	−16.5
Panama	−17.3	−33.2	−38.8	−35.4	−33.1	−47.9
Paraguay	−2.2	−10.2	−13.7	−10.7	−7.6	−6.6
Peru	−41.8	−71.9	+31.7	+18.2	−20.2	−42.1
Uruguay	−27.3	−53.3	−81.6	−16.5	−64.0	−10.8
Venezuela	+7.5	−101.1	+414.9	+447.4	+509.1	+568.5
TOTAL, Latin America	−674.7	−1,219.6	−1,065.6	−1,176.0	−939.6	−203.0
TOTAL, Latin America (excluding Cuba)	−626.9	−1,132.6	−1,065.6	−1,176.0	−939.6	−203.0
TOTAL, Latin America (excluding Cuba and Venezuela)	−634.4	−1,031.5	−1,480.5	−1,623.4	−1,448.7	−771.5

SOURCE: International Monetary Fund, *Balance of Payments Yearbook*, vols. 12, 13, 14 and 15.

[a] Estimates.

[b] No data available after 1960.

[c] 1956–59.

A review of the figures for the remaining countries will show that in 1963 the deficits became even larger in Bolivia, Chile, Costa Rica, El Salvador, Honduras, Mexico, Nicaragua and Peru, and decreased appreciably in Colombia, Ecuador, Guatemala, Paraguay and Uruguay.

It has already been said that in 1963 Latin America as a whole drastically reduced its net use of compensatory financing, which had hitherto provided a relatively large amount of capital. In fact, financing of this kind rose from 400 to 600 million dollars in 1960–62, whereas in 1963 there were net outflows of funds or an accumulation of reserves representing a total of 300 million dollars for the region as a whole and 110 million dollars with Venezuela excluded.

Net autonomous movements of capital into the region (see table 25) averaged 800 million dollars annually over the four-year period 1960–63; in 1961 they reached the record level of 1,100 million, and are then estimated to have dropped to 765 million in 1963.

These figures were appreciably reduced by the disinvestment that has been taking place in Venezuela in the last few years, where net outflows of autonomous capital averaging 380 million dollars annually were registered in the four-year period 1960–63. Consequently, if Venezuela is excluded, the average yearly net investment in the region as a whole was 1,200 million dollars during the period in question. The maximum figure recorded was 1,500 million dollars in 1961, which dropped to about 1,100 million dollars in the next few years.

The analysis by countries reveals the sharp contraction which these net capital receipts underwent in Argentina, where they fell from an annual average of over 400 million dollars in 1960–61 to about 20 million in the past two years. Net movements also declined to a certain extent in Brazil in 1963. By contrast, capital inflows augmented in Central America, Chile, Colombia and Mexico, as can be seen from table 25.

It is especially interesting, therefore, to identify the particular elements in autonomous capital inflows that determined over-all investment levels and were responsible for the variations that took place. The pertinent information is given in table 26.

Autonomous investment is classified in table 26 under four main heads, namely, net direct investment, net long-term loans to the public and private sectors, official donations and other net movements. It is useful to remember that the figures for net direct investment include the reinvestment of profits on existing capital, and that other net movements comprise movements of capital taking place in long-term assets and short-term credits.

Table 25. Latin America: Net autonomous capital movements

(Annual average in millions of dollars)

	1951–55	*1956–60*	*1960–63*	*1960*	*1961*	*1962*[a]	*1963*[a]
Central America	+17.5	+62.8	+79.6	+66.4	+49.9	+88.4	+113.7
Argentina	+60.7	+167.6	+220.9	+396.8	+443.1	+7.5	+36.0
Brazil	+90.6	+274.8	+246.3	+239.0	+315.0	+318.0	+113.0
Chile	+23.2	+68.0	+196.5	+87.4	+218.3	+188.5	+291.7
Colombia	+48.6	+13.8	+39.3	+30.2	+40.5	−23.8	+62.7
Mexico	+107.8	+192.1	+240.2	+199.6	+304.8	+211.1	+245.1
Venezuela	+79.5	+313.1	−374.7	−312.9	−384.4	−411.2	−390.1
TOTAL, Latin America (excluding Cuba)	+511.7	+1,293.7	+819.1	+857.0	+1,073.9	+580.6	+765.0
TOTAL, Latin America (excluding Cuba and Venezuela)	+432.2	+980.6	+1,193.8	+1,169.9	+1,458.3	+991.8	+1,155.1
TOTAL, Latin America (excluding Cuba, Venezuela and Argentina)	+371.5	+813.0	+972.9	+773.1	+1,015.2	+984.3	+1,119.1

SOURCE: International Monetary Fund, *Balance of Payments Yearbook*, vols. 12, 13, 14 and 15.

[a] Provisional figures.

Table 26. Latin America: Net autonomous capital movements

(Annual average in millions of dollars)

Year or period	*Net direct investment*	*Net long-term loans*			*Official donations*	*Other net movements*	*Total*
		To the private sector	*To the public sector*	*Total*			
			Total (excluding Cuba)				
1951–55	+325.3	+48.2	+45.1	+93.3	+29.2	+63.9	+511.7
1956–60	+850.9	+193.6	+142.5	+336.1	+104.9	+1.8	+1,293.7
1960	+399.3	+219.2	+78.7	+297.9	+132.7	+27.1	+857.0
1961	+288.9	+339.9	+552.3	+892.2	+140.6	−247.8	+1,073.9
1962	+265.2	+309.5	+400.8	+710.3	+137.6	−532.6	+580.6
			Total (excluding Cuba and Venezuela)				
1951–55	+252.0	+48.9	+45.5	+94.4	+29.0	+56.8	+432.2
1956–60	+537.2	+191.9	+133.4	+325.3	+104.8	+13.3	+980.6
1960	+544.5	+211.7	+223.5	+435.2	+132.6	+57.6	+1,169.9
1961	+359.3	+336.7	+598.6	+935.3	+140.4	+23.3	+1,458.3
1962	+449.6	+289.7	+430.4	+720.1	+137.4	−315.3	+991.8

The data contained in this table clearly show three distinct types of evolution in autonomous capital movements towards Latin America as a whole: first, long-term loans increased considerably, particularly those intended for the public sector or enterprises with government guarantee; secondly, net direct investment fell off appreciably in recent years, and, thirdly, other capital movements indicate a net outflow of funds from 1961 onwards.

For the region as a whole, direct investment in the second half of the fifties (1956–60) averaged 850 million dollars annually, which became 400 million dollars in 1960 and about 260 million in 1962. The high levels attained in the fifties were largely attributable to investment in Venezuela, and the subsequent drastic decline was also partly the result of net disinvestment suffered by that country.

Accordingly, if Venezuela is excluded (see second part of table 26), it will be observed that from 1960 onwards the figures for net direct investment are higher than for the region as a whole, the difference representing net disinvestment in Venezuela. With that country excluded, direct investment amounted to 540 million dollars in 1960, or slightly more than the average for the second half of the fifties. However, in 1961–62, the annual average for direct investment amounted to only 400 million dollars. In all probability, Argentina and Mexico were instrumental in causing this decline, to judge from the evolution of the aggregate autonomous capital movements reviewed in the preceding section.

Table 27. Latin America: Current foreign exchange earnings and commitments under the head of financial servicing

(*Average annual in millions of dollars*)

Year or period	Foreign exchange earnings[a]	Dividends and other income from foreign capital[b]	Interest on loans[b]	Amortization of long-term loans including autonomous and compensatory loans[b]
	(a) *Total (excluding Cuba)*			
1951–55	7,973.3	838.1	97.1	314.8
1956–60	9,343.8	1,068.4	193.7	888.3
1960	9,576.3	960.6	275.9	1,137.6
1961	9,828.6	1,081.0	319.5	1,253.4
1962[c]	10,203.6	1,090.4	348.1	1,157.9
1963[d]	10,816.5	1,057.8	363.5	1,440.0
	(b) *Total (excluding Cuba and Venezuela)*			
1951–55	6,340.7	356.7	96.6	312.2
1956–60	6,766.6	385.1	189.0	690.6
1960	7,047.0	442.9	265.9	893.8
1961	7,246.5	520.3	296.9	950.9
1962[c]	7,568.6	492.1	326.9	1,007.0
1963[d]	8,157.7	465.7	347.5	1,310.0
	(c) *Total (excluding Brazil, Cuba and Venezuela)*			
1951–55	4,700.1	254.9	55.0	137.2
1956–60	5,254.2	325.7	96.8	380.4
1960	5,600.0	381.9	128.9	490.8
1961	5,719.5	459.3	170.9	623.9
1962[c]	6,262.6	409.1	203.9	697.0
1963[d]	6,657.7	426.7	226.5	846.6
	(d) *Total (excluding Argentina, Brazil, Cuba and Venezuela)*			
1951–55	3,602.9	246.1	41.8	124.0
1956–60	4,108.1	297.9	77.1	313.5
1960	4,329.0	318.9	103.5	412.0
1961	4,518.2	343.4	121.0	422.6
1962[c]	4,869.6	371.9	161.0	465.3
1963[d]	5,150.6	391.7	183.1	525.7

SOURCE: International Monetary Fund, *Balance of Payments Yearbook*, vols, 12, 13, 14 and 15.

[a] Including total income under the head of goods and services on current account.

[b] Gross disbursements.

[c] Provisional figures.

[d] Estimates.

Long-term loans took an entirely different course, since they expanded rapidly while direct investment was declining. Table 26 indicates that in 1961–62 net long-term loans to the region as a whole (excluding Venezuela, which also underwent a certain amount of net disinvestment under this head) was approximately 830 million dollars annually, whereas in 1960 they had averaged 430 million and in 1956–60 325 million annually. Thus, in this short lapse of time, net long-term loans were well on the way to being trebled. The largest proportional increase took place in loans to the public sector or to enterprises with government guarantee. In the last few years loans of this kind rose to 500 million dollars from 230 million in 1960 and only 140 million in the second half of the fifties.

Table 28. Latin America: Financial servicing as a percentage of current foreign exchange earnings

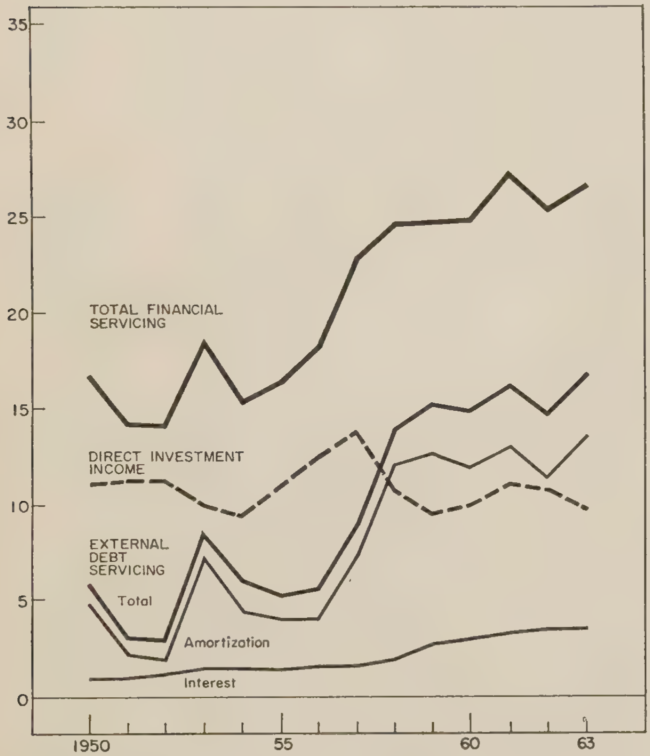
Year	Direct investment income	External debt servicing: Interest	Amortization	Total	Over-all total
		(a) *Excluding Cuba*			
1951–56	10.5	1.2	3.9	5.1	15.6
1956–60	11.4	2.1	9.5	11.6	23.0
1960	10.0	2.9	11.9	14.8	24.8
1961	11.0	3.3	12.8	16.1	27.1
1962	10.7	3.4	11.3	14.7	25.4
1963	9.8	3.4	13.3	16.7	26.5
		(b) *Excluding Cuba and Venezuela*			
1951–56	5.6	1.5	4.9	6.4	12.0
1956–60	5.7	2.8	10.2	13.0	18.7
1960	6.3	3.8	12.7	16.5	22.8
1961	7.2	4.1	13.1	17.2	24.4
1962	6.5	4.3	13.3	17.6	24.1
1963	5.7	4.3	16.1	20.4	26.1
		(c) *Excluding Cuba, Venezuela and Brazil*			
1951–56	5.4	1.2	2.9	4.1	9.5
1956–60	6.2	1.8	7.2	9.0	15.2
1960	6.8	2.3	8.8	11.1	17.9
1961	8.0	3.0	10.9	13.9	21.9
1962	6.5	3.3	11.1	14.4	20.9
1963	6.4	3.4	12.7	16.1	22.5
		(d) *Excluding Argentina, Brazil, Cuba and Venezuela*			
1951–56	6.8	1.2	3.4	4.6	11.4
1956–60	7.3	1.9	7.6	9.5	16.8
1960	7.4	2.4	9.5	11.9	19.3
1961	7.6	2.7	9.4	12.1	19.7
1962	7.6	3.3	9.6	12.9	20.5
1963	7.6	3.6	10.2	13.8	21.4

SOURCE: ECLA, on the basis of International Monetary Fund publications.

Lastly, in connexion with autonomous movements of capital, it should be noted that there were outflows under various heads related to the movement of long-term assets and short-term credits. In 1962 these outflows represented 500 million dollars for the region as a whole, and some 315 million if Venezuela is excluded.

The direct investment and external debt acquired by Latin America through the movements of capital described above resulted in an excess of financial service payments under the heads of profits, interest and amortization over current foreign exchange earnings. Consequently, the relative burden of these commitments on the balance of payments has intensified to the point of absorbing a very high proportion of current income.

Figure XV. Latin America: Financial servicing, 1950–63
(As a percentage of current foreign exchange earnings)
Natural scale



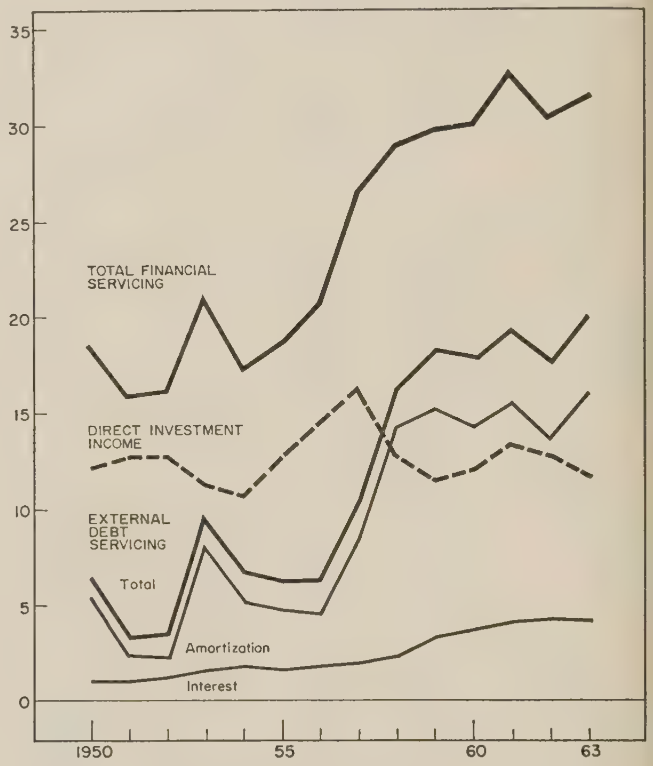
Source: ECLA, on the basis of IMF statistics.

The balances of payments have therefore tended to become very rigid, and this tendency has been enhanced by the severe restrictions imposed on imports which have assumed such an inflexible structure in a number of countries that any change in their composition or level inevitably leads to a decline in the growth rate or a reduction in domestic economic activities.

Dividends and other income from foreign capital which, for the region as a whole, averaged about 1,060 million dollars annually over the period 1956–60, remained at almost the same level in 1963. If Venezuela—which carries most weight in the total—is excepted, the corresponding transfer payments for the other Latin American countries as a whole went up from an average of 380 million dollars in 1956–60 to 470 million in 1963. In other words, payments under the head of dividends and other income from foreign capital represented 9.8 per cent of total foreign exchange earnings from exports of goods and services for the region as a whole and 6.0 per cent if Venezuela is excluded. On the whole, these transfer payments maintained a fairly stable relationship with the variations in foreign exchange earnings, as may be seen from the data contained in tables 27 and 28 for different groups of countries.

On the other hand, payments under the head of interest and amortization in respect of loans increased far more than current foreign exchange earnings. For the region as a whole, excluding Venezuela, interest on loans of all kinds rose from 190 million dollars in 1956–60 to some 350 million dollars in 1963, and their relation to total foreign exchange earnings went up from 3.8 to 4.3 per cent. Loan servicing followed a similar trend, representing 12.7 per cent of total receipts in 1960 and 16.1 per cent in 1963.

Figure XVI. Latin America: Financial servicing, 1950–63
(As a percentage of exports of goods)
Natural scale



Source: ECLA, on the basis of IMF statistics.

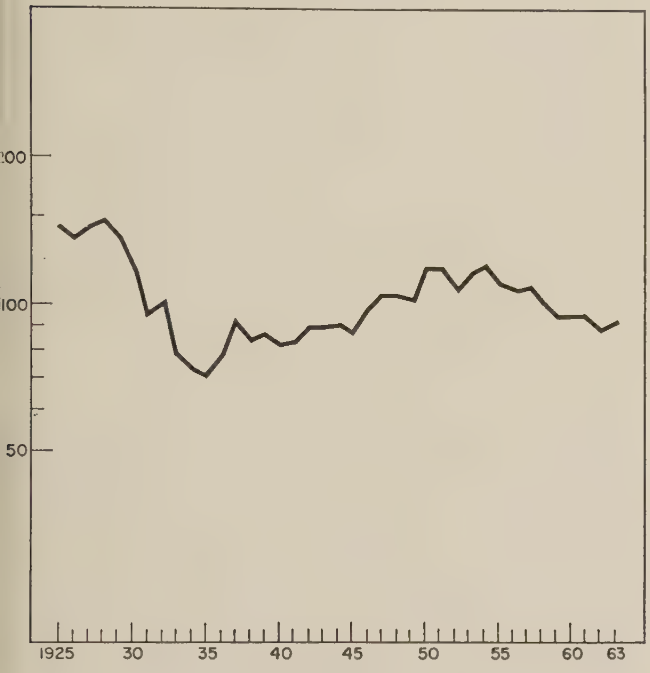
To sum up, in the group of countries excluding Venezuela, the relationship between external debt servicing (interest and amortization) and total foreign exchange earnings rose from 16.5 to 20.4 per cent between 1960 and 1963, whereas it was only 6 per cent in the first half of the fifties. Dividends and other income from foreign capital represented 6 to 7 per cent of current receipts, so that the relation between aggregate liabilities and current income rose from 22.8 per cent in 1960 to 26.1 per cent in 1963. For the region as a whole, this coefficient increased from 24.8 to 26.5 per cent in the period under review (see again table 28). Figures XV and XVI show the intensive expansion of these liabilities since the middle of the fifties in comparison with total current receipts and income from exports of goods. The situation has reached the point where the sum of dividends, interest and amortization in respect of foreign investment and loans now represents about one third of the value of exports of goods.

B. THE TRENDS OF THE EXTERNAL TERMS OF TRADE

1. EXPORT AND IMPORT PRICES AND THE EXTERNAL TERMS-OF-TRADE EFFECT

The trend of Latin America's external terms of trade was relatively unfavourable in 1959–60, and declined even further in 1962. In 1963 they recovered slightly but remained at the extremely low levels reached after a period of intense decline. The index for 1963 is 8 per cent less than that for 1958, and 21 per cent below the average for 1950–54.

Figure XVII. Latin America: Evolution of the terms of trade, 1925–63
(INDEX: 1958=100)
Semi-logarithmic scale



SOURCE: ECLA, on the basis of official foreign trade statistics.

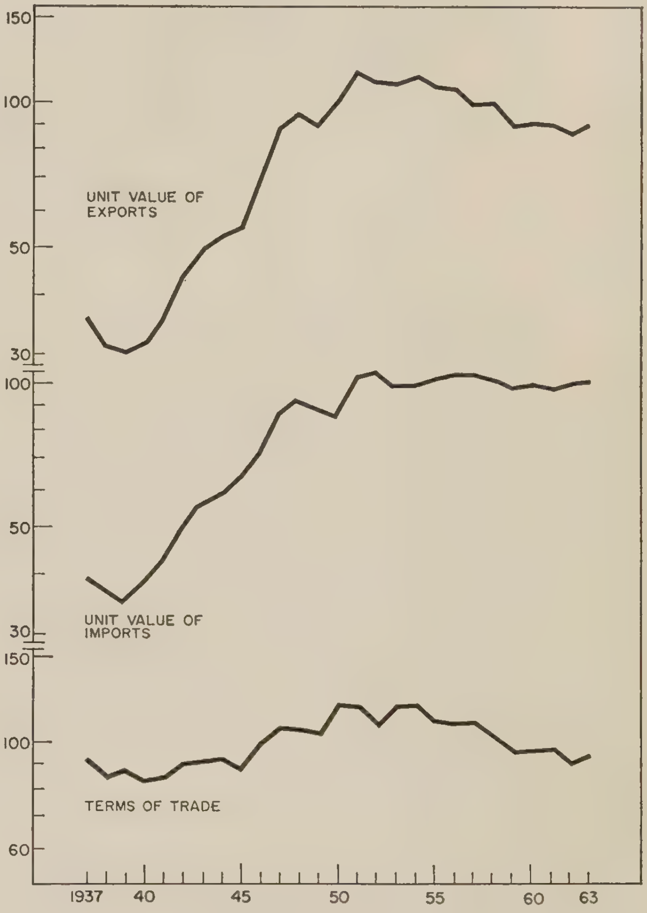
In fact, Latin America's external terms of trade declined to levels similar to those in the Second World War and 1937, the latter having been, in its turn, 35 per cent lower than that prevailing in Latin America before the Depression. Figure XVII illustrates the evolution of the terms of trade since 1925 and shows the magnitude of the deterioration that has taken place since the beginning of the fifties after their temporary recovery from the Depression of the thirties.

The fluctuations in the terms-of-trade index and the deterioration of the last few years have been influenced by export and import prices in different ways. The improvement in Latin America's terms of trade in the immediate post-war years and up to 1951 was due to a more rapid increase in the unit prices of exports than of imports. On the other hand, the deterioration that took place up to the end of the fifties was mainly caused by the fall in export prices, since import prices in terms of dollars were fairly stable over the long term, above all in comparison with their fluctuations during the Korean conflict.

In the last few years up to 1962, the deterioration, which was less intensive, seems to have been produced by a gradual increase in the unit cost of imports, since export prices in terms of dollars tended to become more stable for Latin America as a whole. A slight revival in export prices in 1963 thus more than compensated for the rise in import prices that year, and the external terms of trade improved upon their 1962 level (see figure XVIII).

Because of the predominant influence of one or other of its elements, the external terms of trade fell more than 4 per cent a year on an average between 1954 and 1959. From then on they dropped less steeply, the deterioration being estimated to have averaged 1 per cent yearly (see table 29).

Figure XVIII. Latin America: Evolution of the terms of trade, 1937–63
(INDEX: 1958=100)
Semi-logarithmic scale



SOURCE: ECLA, on the basis of official foreign trade statistics.

In order to give some idea of the magnitude of the immediate effect produced by this deterioration, a calculation has been made of the losses it caused in the purchasing power of exports. Two benchmark periods have been adopted for purposes of comparison in the analysis: 1950–54 and 1960.

The estimates of the terms-of-trade effect in relation to 1950–54 show the over-all deterioration that has been taking place in the terms of trade since the middle of the fifties and supply the basis for an evaluation of the cumulative effect of that deterioration on Latin America's economic growth. When 1960 is used as a basis for comparison the estimates serve rather to reveal the way in which the process of deterioration has advanced in the short interval that has elapsed since then.

Table 29. Latin America: Evolution of the external terms of trade
(*Index*: *1958 =100*)

Year or period	*Latin America*	*Argentina*	*Brazil*	*Chile*	*Dominican Republic*	*Colombia*	*Peru*	*Venezuela*	*El Salvador*	*Honduras*	*Mexico*
1950	124.9	120	131	88	154	132	138	133	145	122	133
1954	124.4	93	153	94	140	144	135	124	156	133	122
1956	113.0	84	115	114	119	120	142	119	136	137	116
1959	99.8	93	100	87	99	96	107	109	95	109	91
1960	100.0	100	100	100	100	100	100	100	100	100	100
1961	100.5	102	98	98	105	96	96	103.9	88	91	106
1962	94.9	91	91	96	119	94	97	95.9	87	105	101
1963	97.1	99	89	95	138	95	106	92.9	85	106	105
					Annual cumulative rates of growth						
1950–54	−0.1	−6.2	3.9	1.6	−2.3	2.2	−0.6	−1.8	1.8	2.2	−2.2
1954–59	−4.3	—	−8.2	−1.6	−6.7	−7.8	−4.6	−2.5	−9.4	−3.9	−5.7
1959–63	−0.7	1.6	−2.8	2.2	8.6	−0.3	−4.1	−2.4	−2.7	−0.7	3.6

SOURCE: ECLA, on the basis of official foreign trade statistics.

The salient conclusions that emerge from this investigation (see table 30), may be summarized as follows: if the same external terms of trade had existed in 1960–63 as in 1950–54, Latin America (excluding Cuba) would have had at its disposal an extra margin of purchasing power equivalent to 20 per cent of exports and tourist income over the four years 1960–63 and 2.5 per cent of the domestic product during the same period. The loss in purchasing power was, moreover, very much larger than the net inflow of autonomous capital into Latin America during those same years. It should be noted that a similar situation occurred in the group of countries that excludes Venezuela, although the deterioration in their terms of trade has been less intense in the last few years than in Venezuela, and their capital receipts higher than those of the region as a whole (see again table 30).

If the already depressed terms of trade recorded in 1960 are taken as the basis of comparison, the effect of the deterioration in 1961–63 amounted to 2.5 per cent of exports and tourist income. It is clear that in certain countries, such as Bolivia, Chile and some of the Central American countries, more stable or, in some years, higher terms of trade coincided with an increase in capital inflows.

2. TERMS-OF-TRADE TRENDS BY COUNTRIES

The evolution of Latin America's terms of trade and the trends of its constituent parts—the unit values of exports and imports—are reflected in the experience of almost all the Latin American countries in recent years, although to differing degrees and in certain instances for different lengths of time (see again table 29 and figure XIX).

In Venezuela the fall in the terms of trade has been accentuated in recent years, reaching an annual cumulative rate of more than 4 per cent in 1959–63. This sharp decline appears to have been the combined result of an increase in the unit cost of this country's imports and the decrease in the unit costs of its exports. Mexico and Peru, which have diversified their exports to a greater extent than other Latin American countries, have enjoyed more stable terms of trade since 1960, although at much lower levels than in previous years. In the Dominican Republic the terms of trade underwent a notable improvement between 1960 and 1963 owing to the rise in sugar prices. The deterioration began earlier in Argentina and Uruguay than in the countries exporting tropical products. During the fifties the prices of these two countries' exports fell continuously, and did not start to level off until after 1960. Sharp fluctuations were recorded again later, one example being the price deterioration suffered by Argentina in 1962, mainly in wool and meat. In short, Uruguay's terms of trade remained relatively stable after their recovery in 1960 while those of Argentina improved in 1963.

The general trends reflected by the total index for Latin America were equally applicable to Central America, and in 1962 or 1963 the terms of trade improved for Guatemala, Honduras and Nicaragua, although their levels were much lower than in previous years.

In Brazil and Colombia the terms-of-trade indexes again deteriorated after 1960, but far more slowly than before, and in 1963 tended to become more stable. Finally, Chile's terms of trade improved in 1960, although they failed to regain the average levels prevailing in the fifties, but from then on declined slightly.

3. PRICE TRENDS OF STAPLE LATIN AMERICAN EXPORTS

The series on the unit values of exports reviewed in connexion with the trend of the external terms of trade show that prices fell sharply throughout the fifties, but became steadier after 1960 and were better in 1963.

These general observations should now be completed by an analysis of the price trends of the principal Latin

American exports. The analysis will simply bring out the more obvious features of their evolution, as the situation of each commodity will be examined in detail in the third part of this Survey.

Thus figure XX shows annual world market prices for the staple items while figure XXI traces monthly variations over the last two years. In general, the curves of the two figures reveal three main characteristics in the price behaviour of Latin American exports on international markets, namely: (*a*) a sharp fall in prices, which seems to have been halted about 1959–60; (*b*) a much less steep decline in market prices after 1960 and the achievement of considerable stability by many commodities; and (*c*) a rise in the price of the majority of products during the second half of 1963, with the notable exception of sugar, whose price had already risen.

Table 30. Latin America: Terms-of-trade effect and relative magnitude of capital inflows under all heads

	Annual average							
	1950–54	*1955–59*	*1960–63*	*1961–63*	*1960*	*1961*	*1962*[a]	*1963*[a]
1. *Excluding Cuba*								
(*a*) In millions of 1960 dollars:								
Net external financing[b]	395.2	983.8	850.6	778.9	1,065.6	1,195.6	930.6	210.4
Net autonomous capital inflows	440.7	1,193.9	806.6	789.8	857.0	1,073.9	562.6	732.8
Terms-of-trade effect:								
(i) With respect to 1960	1,279.5	604.6	...	−236.2	—	+68.0	−478.4	−298.2
(ii) With respect to 1950–54	—	−883.5	−1,918.0	−2,019.5	−1,613.4	−1,594.1	−2,294.5	−2,169.8
(*b*) As a percentage of the gross domestic product:								
Net external financing[b]	0.7	1.5	1.0	0.9	1.4	1.5	1.1	0.2
Net autonomous capital inflows	0.8	1.8	1.0	0.9	1.1	1.3	0.7	0.9
Terms-of-trade effect with respect to 1960	2.4	0.9	...	−0.3	—	0.1	−0.6	−0.3
(*c*) As a percentage of the quantum of exports of goods and tourist income:								
Net external financing[b]	6.5	12.8	9.1	8.1	12.3	13.3	9.5	2.1
Net autonomous capital inflows	7.3	15.6	8.6	8.2	9.9	12.0	5.7	7.2
Terms-of-trade effect:								
(i) With respect to 1960	21.0	7.9	...	−2.4	—	0.8	−4.9	−2.9
(ii) With respect to 1950–54	—	−11.5	−20.4	−21.0	−18.6	−17.8	−23.4	−21.4
2. *Excluding Cuba and Venezuela*								
(*a*) In millions of 1960 dollars:								
Net external financing[b]	405.5	800.5	1,331.0	1,281.2	1,480.5	1,652.1	1,434.5	756.9
Net autonomous capital inflows	358.3	809.7	1,190.7	1,197.6	1,169.9	1,466.4	984.9	1,141.4
Terms-of-trade effect:								
(i) With respect to 1960	954.6	229.4	...	−169.5	—	−25.4	−372.8	−110.2
(ii) With respect to 1950–54	—	−984.0	−1,500.5	−1,586.1	−1,243.7	−1,330.2	−1,814.3	−1,613.8
(*b*) As a percentage of the gross domestic product:								
Net external financing[b]	0.8	1.3	1.8	1.7	2.1	2.2	1.9	1.0
Net autonomous capital inflows	0.7	1.3	1.6	1.6	1.7	2.0	1.2	1.5
Terms-of-trade effect with respect to 1960	2.0	0.4	...	−0.2	—	−0.03	−0.5	−0.1
(*c*) As a percentage of the quantum of exports of goods and tourist income:								
Net external financing[b]	8.7	14.4	19.3	18.1	23.6	25.2	20.0	10.1
Net autonomous capital inflows	7.7	14.5	17.3	16.9	18.6	22.4	13.7	15.2
Terms-of-trade effect:								
(i) With respect to 1960	20.5	4.1	...	−2.4	—	−0.4	−5.2	−1.5
(ii) With respect to 1950–54	—	−17.7	−21.8	−22.4	−19.8	−20.3	−25.2	−21.5

Sources: ECLA, on the basis of official statistics and IMF publications.

[a] Provisional figures.

[b] Defined as the balance on current account, with the opposite sign.

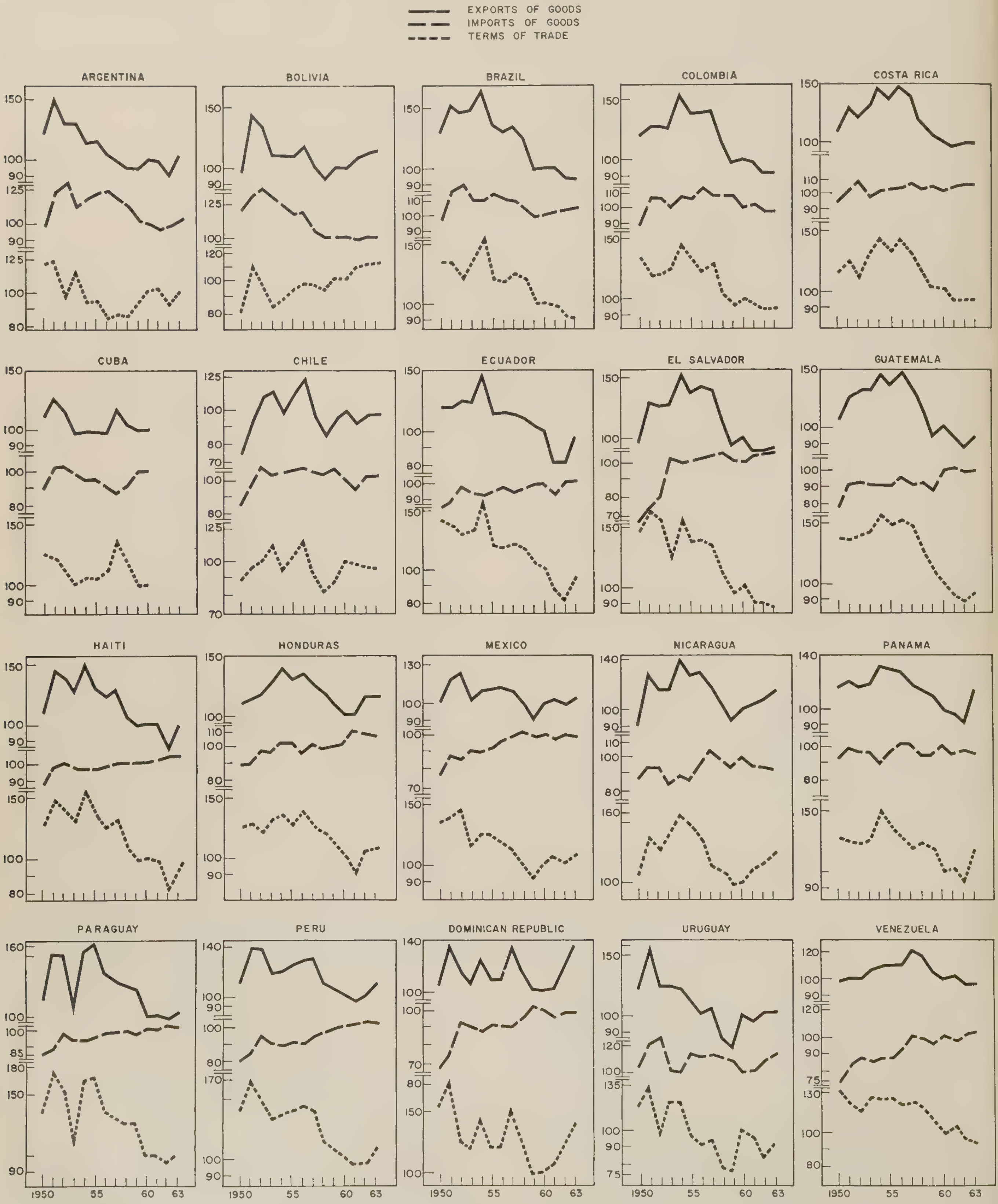
The movements of market quotations for certain products will now be reviewed. As far as minerals are concerned, a certain stability can be discerned in recent years for copper, although levels were lower than in 1955, and tin and silver prices rose; lead and zinc prices continued to decline in 1961 and 1962 but reacted to a certain extent in 1963.

Petroleum prices appear to have been stable since 1959. The quotations are, however, posted prices, on which a discount is made, which means that the actual prices received by Venezuela have been dropping since 1957.

As regards tropical products, the most striking features are the increase in the price of sugar and a slight upswing in coffee prices towards the end of 1963. The recovery of cacao prices, which had been falling sharply up to 1962, is also worthy of mention. By contrast, cotton prices remained relatively stable, but at the low 1959 level.

Prices for temperate-zone agricultural commodities followed similar trends. Wheat and maize maintained the levels attained in the last few years of the fifties,

Figure XIX. Latin America: Unit value of exports and imports and terms of trade, 1950–63
(INDEX: 1960=100)
Semi-logarithmic scale

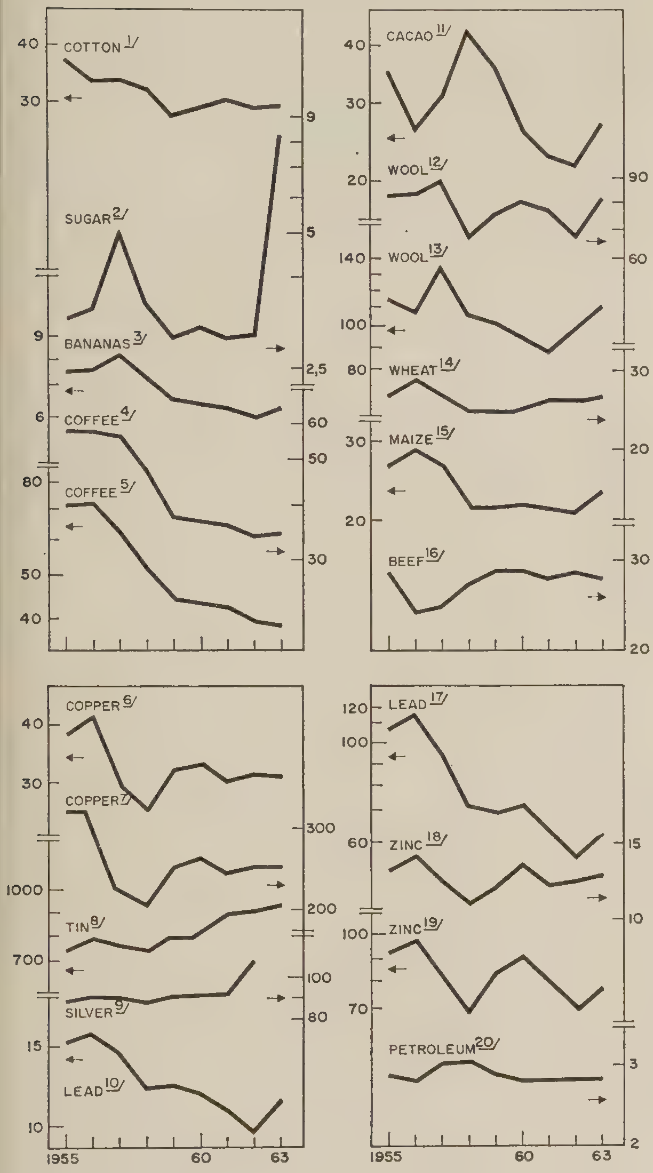


SOURCE: ECLA, on the basis of official foreign trade statistics.

Figure XX. Latin America: Prices of selected primary export commodities, 1955–63

(DOLLAR CENTS PER LB)

Semi-logarithmic scale



SOURCES: United Nations, *Monthly Bulletin of Statistics*; International Monetary Fund, *International Financial Statistics*.

Notes:

[1] Mexican Matamoros SM-1-1/16, import price c.i.f. Liverpool.

[2] Export price f.o.b. Caribbean, centrifugal, 96° New York, spot.

[3] Central America export price f.o.b., United States (dollars per 100 lb).

[4] Santos, import price ex-dock New York.

[5] Manizales, import price ex-dock New York.

[6] Electrolytic, bars and ingots, domestic price United States.

[7] Electrolytic, bars and ingots, import price London (pounds sterling per long ton).

[8] Standard, import price London (pounds sterling per long ton).

[9] Price New York (cents per ounce).

[10] Domestic price United States.

[11] Bahia, import price New York.

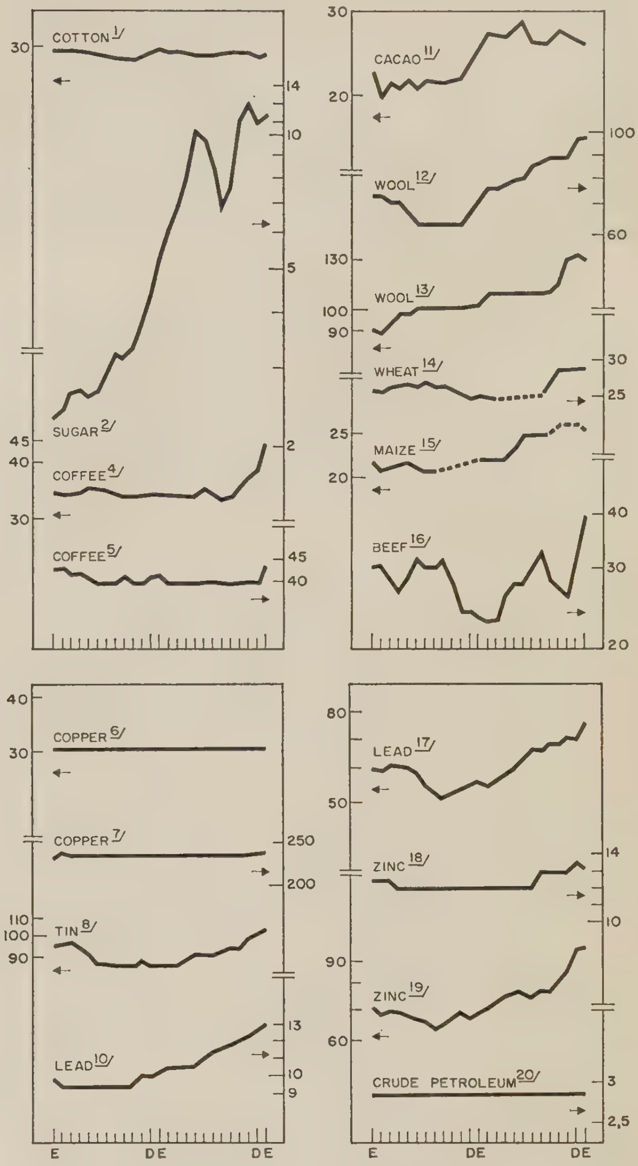
[12] Buenos Aires 5/6′ (40/36's), import price Boston, clean basis.

[13] Montevideo super 0's (48's–50's), import price Boston, clean basis.

Figure XXI. Latin America: Monthly prices of selected primary export commodities

(DOLLARS CENTS PER LB)

Semi-logarithmic scale



SOURCE: For sources and notes see figure XX.

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[14] Argentina, up-river, export price United Kingdom (pounds sterling per long ton).

[15] La Plata, export price United Kingdom (pounds sterling per long ton).

[16] Chilled, import price at London (pence per lb).

[17] Purity 99.97 per cent, import price London (pounds sterling per long ton).

[18] Prime Western, domestic price United States.

[19] Purity 98.75 per cent, import price London (pounds sterling per long ton).

[20] Venezuelan crude, export price f.o.b. Puerto La Cruz, 35–35.9° API gravity (dollars per barrel).

shading upwards in 1963, while wool and meat tended to rise, especially towards the end of that year.

The main factors underlying the price recovery were the actual or potential restrictions on supply deriving from the adverse climatic conditions that affected production in the Latin American countries, notably Argentina, Brazil and Cuba, and also in Europe.

In the case of sugar, the determining factors, apart from the decline in production, were the changes that took place in international trade flows as a result of the exclusion of Cuban sugar from the United States market, while for some temperate-zone commodities, as, for example, wheat, heavy buying by the centrally planned economies also affected prices.

For Latin America as a whole, this general rise in commodity prices in 1963 merely resulted in an improvement of 2.3 per cent in the external terms-of-trade index. This explains why there was no increase in the prices of commodities of such outstanding importance as petroleum, or in those of other less important export items. Moreover, the bulk of the rise took place in the second half of the year, which meant that its whole weight was not felt by either the annual average unit cost of exports or the sales that had been agreed upon previously or were governed by fixed-price contracts.

C. EVOLUTION OF IMPORTS AND IMPORT COMPOSITION

1. IMPORT VOLUME

The volume of Latin America's imports (excluding Cuba) shrank in 1962 and 1963. Their value (expressed in constant 1960 prices) amounted to 7,120 million dollars in 1960, rose to 7,400 million in 1961, and fell in the next two years, dropping to as little as 7,200 million in 1963 (see table 31).[2] Thus, in 1963, the volume of Latin America's imports was close to that of five years earlier (see figure XXII).

Table 31. Latin America: Imports of goods[a]

(Millions of 1960 dollars)

Country or area	*Average*		*1960*	*1961*	*1962*	*1963*
	1950–54	*1955–59*				
Argentina	797.9	869.8	1,099.4	1,309.7	1,192.1	836.8
Bolivia	60.0	70.3	70.3	76.6	91.5	104.5
Brazil	1,221.6	1,086.6	1,293.0	1,266.7	1,266.0	1,265.0
Chile	312.6	359.1	491.7	594.8	494.4	598.0
Central America	314.2	441.4	458.7	430.1	485.1	546.4
Colombia	443.5	456.6	496.4	520.4	512.2	491.3
Dominican Republic	92.3	122.5	90.3	71.1	134.0	156.1
Ecuador	68.0	100.8	109.8	116.7	113.0	125.1
Haiti	42.6	41.1	38.3	37.2	40.6	35.0
Mexico	882.5	1,035.7	1,144.9	1,132.7	1,114.1	1,222.3
Paraguay	31.4	39.2	45.9	48.7	40.3	40.2
Panama	71.9	91.8	108.5	130.1	150.4	174.7
Peru	247.2	345.0	319.1	396.5	449.3	469.2
Uruguay	212.2	164.6	206.6	187.3	193.7	142.5
Venezuela	933.8	1,460.2	1,140.2	1,115.9	1,048.7	1,005.1
TOTAL	5,731.7	6,684.7	7,113.1	7,434.8	7,325.8	7,212.2
TOTAL (excluding Cuba and Venezuela)	4,797.9	5,224.5	5,972.9	6,318.9	6,277.1	6,207.1
TOTAL (excluding Argentina, Cuba and Venezuela)	4,000.0	4,354.7	4,873.5	5,009.2	5,085.0	5,370.3
Imports from Latin American countries[b]	655.7	724.8	680.0	580.0	670.0	690.0[c]

SOURCE: ECLA, on the basis of official statistics.

[a] F.o.b. values in millions of 1960 dollars.

[b] F.o.b. values in millions of current dollars.

[c] Estimate.

The increase in the volume of imports recorded in 1961 was associated with a marked expansion of the domestic product, and the subsequent decline accompanied a falling off in Latin America's rate of growth. However, these movements did not match one another, and the share of imports in final demand decreased, as indicated by the coefficient for the relationship between import volume and the gross domestic product.

This coefficient for the region as a whole fell from 9.2 in 1960 to 8.4 in 1963; that is to say, that those years saw a continuation of the downward trend that had been persisting for some time, since in 1951–52 the mport coefficient had been over 11.0. This trend undoubtedly reflects the progress made by import substitution in Latin America during the last few years, but this factor does not in itself fully explain the marked fall in imports around 1962 and 1963. The balance-of-payments problems facing the region have led countries to take strong measures to limit imports which have subsequently affected the growth rate. Furthermore, the slower growth of income and reduced levels of internal economic activity have, in some cases, led directly to a contraction in import demand. Thus, for example, two countries (Argentina and Venezuela) were responsible for the fall in Latin America's imports between 1961 and 1963. Whereas total imports declined between these two years by 200 million dollars, those of Argentina alone fell by nearly 500 million dollars and those of Venezuela by some 100 million. That is to say, the remaining Latin American countries increased their imports quite substantially, since they rose from 5,010 million dollars in 1961 to 5,370 million in 1963. Furthermore, it is obvious that the drastic decrease recorded in Argentina was partly due to import substitution in manufactured goods and fuels, but was also a product of the strict measures taken to limit imports and of the reduction in demand as a result of the economic recession there in 1962 and 1963.

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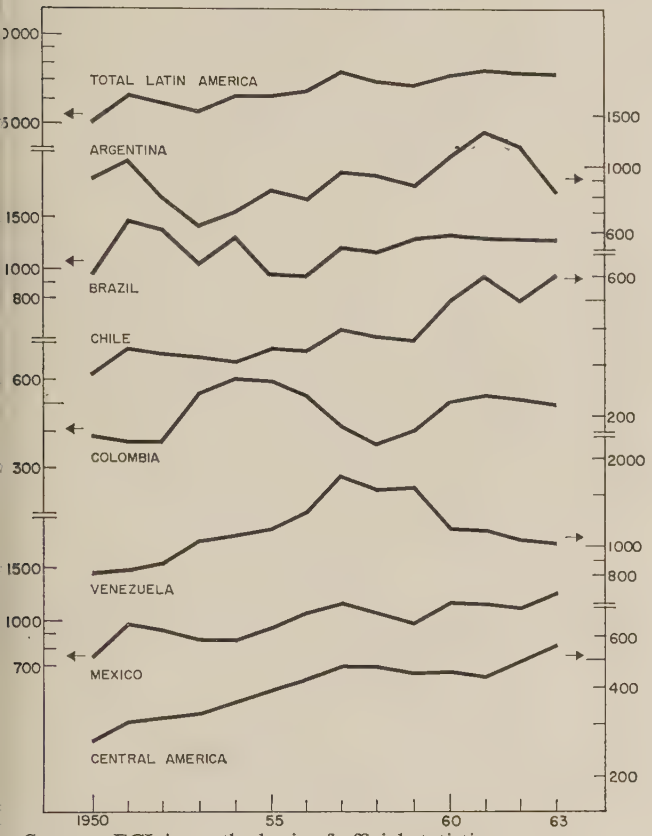
[2] F.o.b. values.

Figure XXII. Latin America: Imports of goods by selected countries, 1950–63

(Millions of 1960 dollars)

Semi-logarithmic scale



Source: ECLA, on the basis of official statistics.

In fact, as these general analyses have already suggested, the trends and behaviour of imports in relation to the internal product have not always followed the same lines in the countries concerned. This is made clear by table 32, which deals with individual countries, and includes indexes measuring, in relation to 1950 levels, the fluctuations in imports and the product in 1960 and 1963, and also adds the import coefficients for each of those years. From this information it may be concluded that Latin America's total imports in 1963 were only 43 per cent more than in 1950, whereas the domestic product expanded by almost 80 per cent in the same space of time. The import coefficient therefore fell from 10.5 in 1950 to 9.2 in 1960 and again to 8.4 in 1963.

In the group of Latin American countries that excludes Argentina, Cuba and Venezuela, imports rose by 62 per cent, and the domestic product by 90 per cent; consequently, the import coefficient fell less than in the case of the region as a whole (from 10.3 in 1950 to 9.1 in 1960 and 8.8 in 1963). In this respect, it is interesting to note the experience of the group of countries that excludes Argentina, Brazil, Cuba and Venezuela. In this group, imports rose by 75 per cent between 1950 and 1963, while the domestic product expanded by 82 per cent; in this case, therefore, the import coefficient for 1963 was only slightly less than for 1950 and very close to that for 1960 (11.6). It should be remarked, however, that in the first half of the fifties this group tended to increase its imports faster than the domestic product, so that the import coefficient rose to 12.8, but that after the middle of the fifties the reverse took place: the domestic product gained upon imports and the coefficient fell to 11.7. A more searching analysis must therefore be undertaken if it is hoped to arrive at exact conclusions on import demand and the progress of import substitution; for the same reason, it is worth commenting on some individual countries, even though the aim of this section is to provide a general picture of the evolution of imports in Latin America.

Argentina is the country that has most drastically reduced its imports in recent years. The decrease of about 500 million dollars recorded between 1961 and 1963 represents a fall of 36 per cent in the short space of two years. It is true that the volume of imports in 1961 was relatively large in comparison with that of previous years, and that the country has also virtually achieved complete import substitution as regards fuels; in addition, there were the severe measures taken to limit imports and the marked fall in real income in 1962 and 1963. In the latter year the import coefficient sank to its lowest level of 5.2, compared with 6.7 in 1960 and 7.4 in 1950.

There was intensive import substitution in Argentina during the entire fourteen-year period covered by this analysis. This is made clear by the indexes of industrial production which show relatively substantial expansion during certain periods, particularly in the dynamic substitution activities connected with intermediate goods, durable consumer goods and capital goods. These activities together expanded by 12.6 per cent annually in 1953–61, and total industrial production, in its turn, increased by 8.2 per cent.

However, the process of import substitution led to an increase in imports of other kinds of raw materials, intermediate goods or parts of the durable consumer or investment goods that were being replaced. Similarly, re-equipment and the expansion of industrial capacity was carried out principally on the basis of imports of capital goods. It was in the fuels category that Argentina's notable substitution effort was made in respect of its former imports of petroleum and petroleum products.

Table 32. Latin America (excluding Cuba): Growth of the gross domestic product and imports of goods

Country or area	*Gross domestic product (index: 1950 = 100)*		*Imports (index 1950 = 100)*		*Import coefficient*[a] *(percentage of gross product)*			
	1960	*1963*[b]	*1960*	*1963*[b]	*1950*	*1955*	*1960*	*1963*[b]
Argentina	133.3	130.1	121.3	92.3	7.4	5.7	6.7	5.2
Bolivia	103.8	112.0	144.1	214.1	15.4	20.2	21.4	(25.2)
Brazil	174.7	202.0	132.9	130.0	7.5	5.6	5.7	4.8
Chile	140.5	157.6	176.9	215.1	11.2	11.6	14.0	15.2
Colombia	156.9	179.6	129.9	128.6	10.9	13.0	9.0	7.8
Costa Rica	186.3	215.4	226.3	251.3	17.6	21.3	21.3	20.6
Dominican Republic	173.2	227.3	142.9	243.0	13.7	17.3	10.1	(13.2)
Ecuador	161.1	181.0	226.4	257.9	9.6	15.3	13.5	13.7
El Salvador	144.4	181.8	162.6	181.9	20.5	19.9	23.1	20.5
Guatemala	142.4	152.4	142.6	154.2	12.8	14.0	12.8	12.9
Haiti	120.5	127.1	100.0	91.4	11.4	13.9	9.5	(9.5)
Honduras	141.6	160.7	166.0	192.4	14.8	18.1	17.3	17.7
Mexico	181.0	208.4	151.0	161.2	11.5	10.6	9.6	8.9
Nicaragua	168.6	218.1	197.2	347.2	15.2	23.9	17.8	24.2
Panama	154.9	183.8	165.9	267.1	24.0	23.5	25.7	(30.5)
Peru	161.8	196.7	177.8	261.4	13.0	16.5	14.3	17.3
Uruguay	124.7	123.9	107.8	74.3	13.1	10.3	11.4	7.9
Venezuela	207.7	237.6	138.2	121.8	22.3	20.2	14.9	11.5
Latin America (excluding Cuba)	160.6	178.5	140.8	142.8	10.5	9.9	9.2	8.4
Latin America (excluding Cuba and Venezuela)	156.7	173.6	141.4	146.9	9.5	8.8	8.6	8.0
Latin America (excluding Argentina, Cuba and Venezuela)	165.6	190.3	146.8	161.8	10.3	9.9	9.1	8.8
Latin America (excluding Argentina, Brazil, Cuba and Venezuela)	159.5	182.4	152.6	175.0	12.2	12.8	11.6	11.7

SOURCE: ECLA, on the basis of official statistics.

[a] Coefficients calculated on the basis of f.o.b. values at 1960 prices.

[b] Estimate.

In 1960–63 the volume of Brazil's imports remained at much the same average level as in the first half of the fifties. As has been pointed out in chapter I, this country achieved during the period under analysis (1950–63) one of the most rapid rates of economic and industrial expansion recorded in Latin America, with a relatively constant level of imports. However, around 1962 and 1963, its balance-of-payments problems became more acute, the inflationary process was accelerated, and the expansion of industrial production began to slacken off. It is clear that one of the principal factors impeding the long-term expansion of the Brazilian economy is the inadequate growth of external purchasing power, which has the effect of limiting imports. In 1963 Brazil's import coefficient dropped to 4.8, thereby reflecting a tendency to decline that has persisted since the beginning of the fifties in common with the trend displayed by the Argentine economy.

The evolution of imports in Chile differed considerably from that of the two countries that have just been examined. Since 1959 Chile's imports have been expanding at a relatively high rate. In that year their value—at 1960 prices—was 360 million dollars, rising to 490 million in 1960 and oscillating between 500 and 600 million in the next three years. Thus, the import coefficient increased from around 11.5 in the first half of the fifties (1950 and 1955) to 15.2 in 1963.

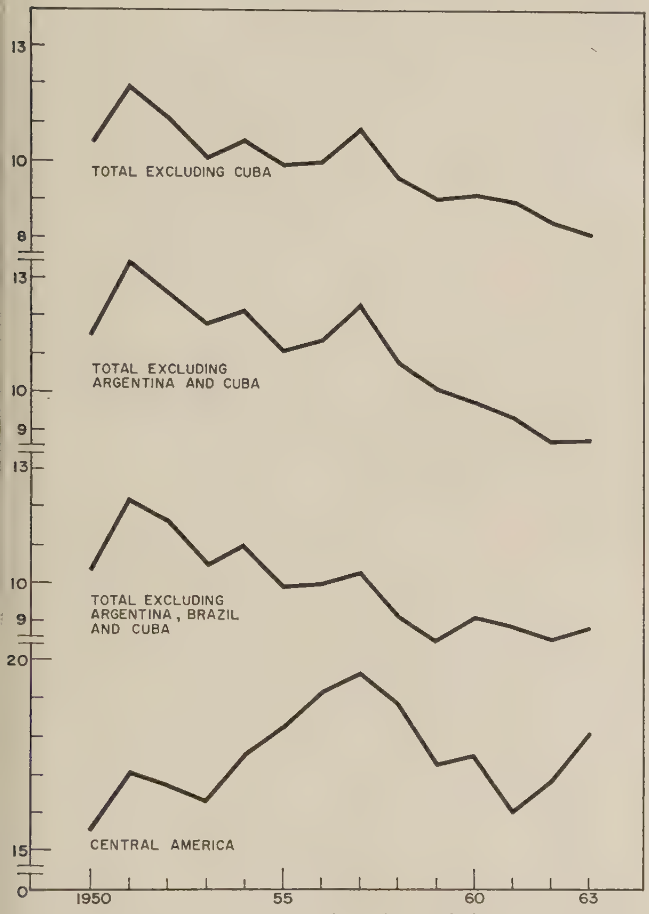
Colombia's imports have shown relatively sharp fluctuations since the beginning of the fifties. Up to 1954 they rose steadily. This was the period when the external terms of trade improved and real income increased. In the second half of the fifties, however, imports fell, reaching their lowest level in 1958; their downward movement was associated with a deterioration in the external terms of trade and a slower rate of growth for income.

From 1958 to 1961 imports again expanded, but tended to fall in the next two years although their levels were still relatively high in comparison with those recorded around the end of the fifties. However, the import coefficient contracted more sharply than the volume of imports, since the domestic product continued to expand after 1960. This coefficient, which had risen from 10.9 to 13.0 between 1950 and 1955, thus fell to 9.0 in 1960 and to 7.8 in 1963.

Of great importance has been the uninterrupted decline in Venezuela's imports since 1957. In that year they reached a record level of 1,757 million dollars (at 1960 prices), dwindling in 1960 to 1,140 million (see again table 31), and thereafter decreasing continuously to only 1,000 million dollars in 1963. Three main factors were responsible for this decline: the policy of import restriction and the allocation of financial resources in such a way as to limit or prevent expenditure of foreign exchange on non-essential imports and other products that could be replaced by domestically produced goods; the decline in the growth rate of income after 1957, which reduced additional import demand to a certain extent; and, finally, the drop in petroleum investment, which involved a large quantity of goods supplied from abroad. The revival of the economic growth rate in the last few years was not matched by an increase in imports, obviously because of the effective import substitution process that is being pursued in Venezuela. All these factors have led to a marked change in the composition of imports and a considerable decrease in the coefficient representing the relation of imports to the domestic product. This coefficient, which had been 22.3 in 1950, fell to 14.9 in 1960 and to 11.5 in 1963.

Figure XXIII. **Latin America: Import coefficient of goods with respect to the gross domestic product, 1950–63**

Natural scale



SOURCE: ECLA, on the basis of official statistics.

The imports of the Central American countries as a whole, which had tended to fall during the latter part of the fifties and up to 1961, expanded very rapidly in 1962 and 1963. Thus, they rose from 430 million dollars in 1961 (see again table 31) to 545 million in 1963. This marked increase reflects the process of recuperation and accelerated growth that has characterized the economic evolution of this group of countries during the past two years. It is interesting to see, from figure XXIII, the trend of imports in relation to the fluctuations of the domestic product for the Central American area. In the middle of the fifties the import coefficient evidently rose significantly, which indicates that import demand was increasing more rapidly than the domestic product. During this period, the external terms of trade improved the purchasing power of exports and accelerated the rate of expansion of real income. When the terms of trade subsequently deteriorated and the growth rate of the product weakened, the import coefficient fell only to rise again in 1962 and 1963 with the expansion of exports. The import coefficient has thus been swinging up and down in response to the characteristic evolution of the product, income and imports in economies with a relatively open external sector, such as those of the Central American countries. The trends of the past two years have also clearly been influenced by two factors of prime importance in the Central American economic process: the expansion of reciprocal trade as a result of the integration policy, and import substitution which is reflected in the rapid growth of industrial production.

Finally, it should be mentioned, with respect to the evolution of imports in the remaining Latin American countries, that between 1960 and 1963 imports expanded in Bolivia, Ecuador, the Dominican Republic and Peru, remained stationary in Haiti and Paraguay, and fell in Uruguay, where the domestic product also declined in the past two years.

Table 33 presents the findings of an analysis that is of particular interest for the study of import demand in Latin America, i.e., the calculation of the total import coefficient for specific groups of products. Imports of consumer goods are shown in relation to total consumption, which comprises imported and domestically produced goods; imports of building materials, machinery and equipment are given as a function of total fixed investment, and, finally, imports of fuels and intermediate goods are expressed as a percentage of the over-all gross domestic product. On this basis, the percentage coefficients of import content have been worked out for types of goods in each of the economic branches in question during the fifties and first three years of the sixties.

In general, this investigation shows that the share of imports in the domestic product dropped fairly sharply for Latin America as a whole in respect of intermediate metal products and fuels (see figure XXIV), but tended to increase or to remain relatively stable in the case of raw materials and non-metallic intermediate goods.

The decrease in the import coefficient for fuels was mainly due to import substitution in Argentina, and in several countries the development of the steel industry tended to diminish the proportion of imported raw materials and intermediate metal products in the over-all domestic product. The process of substitution appears to have been less intensive in the case of non-metallic products considered in the aggregate.

The sharp fall in the import coefficient for building materials since 1950 also reflects the replacement of

Table 33. Latin America: Evolution of the import coefficient by groups of products

Country	*Consumer goods (percentage of total consumption)*		*Capital goods (percentage of total fixed investment)*		*Fuels, raw materials and intermediate goods (percentage of over-all gross domestic product)*		
						Raw materials and intermediate goods	
	Durable	*Non-durable*	*Building materials*	*Machinery and equipment*	*Fuels*	*Metallic*	*Non-metallic*
Latin America excluding Cuba							
1950	0.7	1.8	5.5	24.3	1.2	1.2	3.6
1955	0.7	1.6	4.1	20.4	1.5	1.3	3.5
1960	0.7	1.4	2.7	19.2	1.3	1.0	3.0
1961	0.7	1.4	2.6	17.7	1.1	1.0	3.2
1962	0.6	1.3	2.6	17.5	0.9	0.8	3.1
Argentina							
1950	0.3	0.3	5.4	10.5	1.3	1.3	2.2
1955	0.2	0.3	2.4	7.6	1.3	1.4	1.9
1960	0.6	0.3	1.8	11.5	1.0	1.1	1.6
1961	0.6	0.4	1.4	9.6	0.8	1.5	2.0
1962	0.3	0.4	1.6	11.1	0.6	1.0	1.8
Brazil							
1950	0.6	0.5	2.6	28.8	1.1	0.6	2.0
1955	0.1	0.4	1.8	14.9	1.4	0.4	1.9
1960	0.1	0.3	1.0	16.6	1.2	0.4	1.8
1961	0.1	0.3	1.4	15.3	1.1	0.5	1.7
1962	0.1	0.3	1.0	14.1	1.1	0.5	1.7
Chile							
1950	0.3	1.2	10.4	51.3	1.3	0.8	3.7
1955	0.4	1.2	4.5	39.9	2.0	0.5	3.8
1960	0.6	1.8	5.3	51.1	1.5	0.5	4.2
1961	0.8	2.1	5.7	52.6	1.2	0.6	5.4
1962	0.6	1.8	5.6	40.2	0.8	0.4	3.8
Colombia							
1950	1.1	1.7	5.3	31.1	0.3	0.5	3.0
1955	1.6	1.6	4.1	25.1	0.5	0.6	3.3
1960	0.5	0.8	2.4	20.8	0.2	0.7	3.1
1961	1.0	1.0	2.7	18.0	0.2	0.6	3.1
1962	0.6	0.8	2.3	19.0	0.1	0.7	3.0
Mexico							
1950	0.9	1.0	9.1	35.6	0.5	1.2	3.1
1955	1.1	0.9	5.4	29.1	0.9	1.2	2.8
1960	0.6	0.7	3.0	23.2	0.4	1.1	3.0
1961	0.6	0.7	2.5	20.1	0.3	1.2	2.5
1962	0.6	0.8	2.8	18.2	0.2	1.2	2.5
Peru							
1950	0.8	3.5	4.9	4.3	0.3	0.6	3.5
1955	1.7	3.7	6.0	2.8	0.5	0.9	4.1
1960	1.6	3.3	4.4	3.3	0.8	0.9	4.4
1961	2.1	3.7	5.4	3.7	0.6	1.0	4.7
1962	2.2	3.4	5.6	3.7	0.6	1.0	5.1
Venezuela							
1950	1.5	6.4	6.2	33.2	0.2	0.8	2.6
1955	2.2	5.6	6.2	41.8	0.2	0.6	2.1
1960	1.7	5.1	4.7	22.9	0.1	0.7	2.5
1961	1.5	4.9	3.8	21.3	0.1	0.3	2.6
1962	1.3	4.4	3.3	18.2	0.1	0.7	2.5

SOURCE: ECLA, on the basis of official statistics.

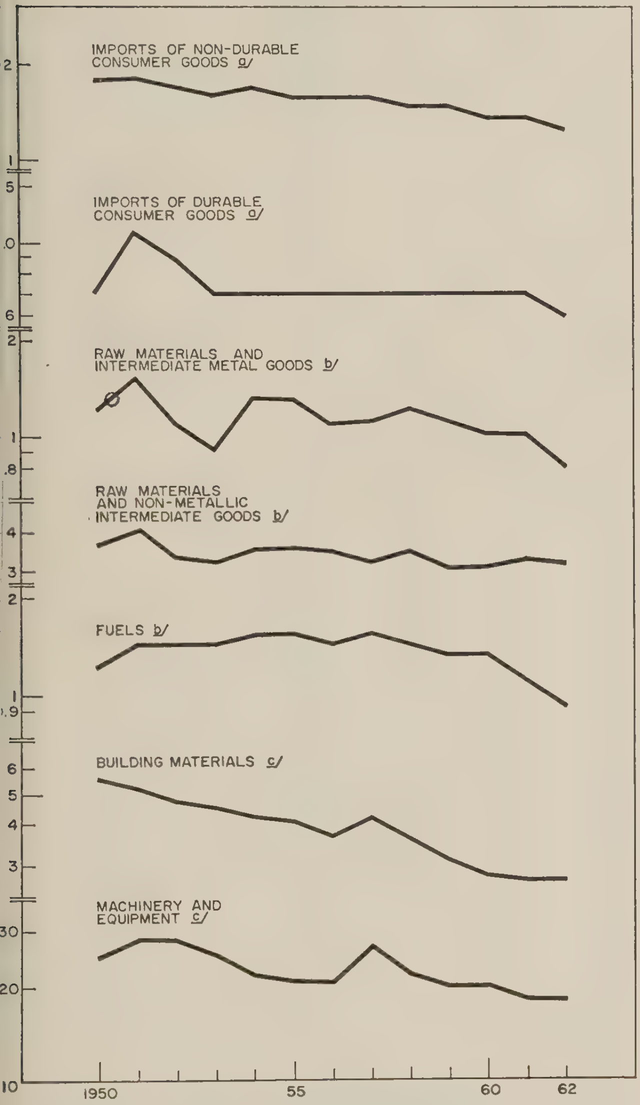
nports by domestic goods, a process which has been dvancing satisfactorily in most of the Latin American ountries.

The contribution of imported machinery and equipnent to total fixed investment has also been declining, although gradually. This indicates that a higher proportion of these goods is being supplied from local sources, although changes in the composition of investment may also have had something to do with the decline in the coefficient.

igure XXIV. Latin America: Evolution of the import coefficient by categories of goods, 1950–62

Semi-logarithmic scale

(PERCENTAGE)



SOURCE: ECLA, on the basis of official foreign trade statistics.
[a] Percentage of over-all gross domestic product.
[b] Percentage of total fixed investment.
[c] Percentage of total consumption.

The share of imported durable goods in total consumption, which has remained relatively stable since the middle of the fifties, fell sharply in 1962. This is a sign that production of this type of goods is being stepped up in Latin America, especially in the motor vehicle sector. Finally, this analysis shows that import substitution of non-durable consumer goods is still taking place, since the share of these goods in total consumption is continuing to shrink, although rather slowly; this is understandable, because the process is nearing saturation point in the countries that have completed certain stages of their industrial development. It is obvious, of course, that the general trends revealed by the analysis may be modified in some countries; they are, nevertheless, fairly representative of the course of the substitution process in Latin America.

2. EVOLUTION OF IMPORT COMPOSITION

Table 34 analyses the composition of imports, by ten major categories of goods according to their economic nature and the degree of industrial processing they receive.

For Latin America as a whole the composition of imports in 1962 was as follows: consumer goods (17.8 per cent); fuels (7.9 per cent); raw materials and intermediate goods (35.0 per cent); capital goods and building materials (37.5 per cent); other unspecified goods (1.8 per cent). As compared with the composition of imports in 1960, there have been important modifications affecting three items in particular: the respective shares of fuels decreased whereas that of raw materials, intermediate products and capital goods increased; in other words, the proportion of total imports accounted for by consumer goods tended to remain at approximately 18 per cent.

These tendencies are accentuated if the comparative analysis is taken further back, as can be gathered from the figures for 1950 and 1955 included in table 34. However, it would not be prudent to generalize from this statistical analysis of the total figures for the region as a whole; the evolution of the import structure in individual countries or groups of countries must also be examined in order to bring out each one's distinctive characteristics and take into account the evolution of the volume of imports in relation to income and internal economic activity.

In the first place, an examination will be made of the composition of imports in those countries which, because of the magnitude of their purchases, carry the greatest weight in the total: Argentina, Brazil, Mexico and Venezuela.

The composition of imports in Argentina has undergone significant changes in the last few years. To begin with, the share of fuels diminished as a result of the intensive substitution process taking place in that country. By the middle of the fifties, fuels were accounting for almost a fifth of total imports, their share decreasing to 8.1 per cent in 1962 and to even less in 1963. Another distinctive feature has been the increased contribution made by durable consumer goods after 1960, notwithstanding the contraction which took place in 1962. The respective proportions of intermediate goods and capital goods varied appreciably from year to year, owing to changes in import policy and the internal economic situation. Nevertheless, their proportions are still substantial and that of capital goods has considerably increased.

Thus, in 1962, 43.2 per cent of Argentina's imports consisted of intermediate goods (including building

Table 34. Latin America: Structure and total coefficient of imports of goods,[a] 1950–62

(*Percentage of total*)

Country or area	Import coefficient (percentage of gross product)	Consumer goods			Fuels	Raw materials and intermediate goods			Capital goods					Miscellaneous
		Non-durable	Durable	Total		Metallic	Non-metallic	Total	Building materials	Agricultural machinery and equipment	Industrial machinery and equipment	Transport machinery and equipment	Total	
Latin America[a]														
1950	10.5	13.6	5.9	19.5	8.2	7.4	26.4	33.8	6.5	4.8	17.6	7.2	36.1	2.4
1955	9.9	12.7	5.8	18.5	10.6	7.6	26.9	34.5	5.5	3.8	17.6	7.5	34.4	2.0
1960	9.2	11.9	6.2	18.1	9.4	7.6	28.2	35.8	4.1	3.4	17.2	9.4	34.1	2.6
1961	9.1	12.5	6.3	18.8	8.1	8.7	29.6	38.3	3.9	3.0	17.4	7.4	31.7	3.1
1962	8.7	12.7	5.1	17.8	7.9	7.2	27.8	35.0	4.8	2.7	21.0	9.0	37.5	1.8
Argentina														
1950	7.4	5.7	3.9	9.7	14.6	13.1	30.8	44.0	8.3	3.5	14.7	4.8	31.3	0.4
1955	5.7	6.3	2.9	9.2	17.7	17.8	32.1	49.9	4.1	3.7	9.5	5.6	22.9	0.3
1960	6.7	5.1	9.4	14.6	12.3	12.4	23.4	35.8	3.6	4.1	19.0	9.8	36.5	0.8
1961	7.5	6.9	8.3	15.2	9.4	15.8	28.4	44.2	2.7	2.7	16.5	8.2	30.1	1.1
1962	7.1	6.8	4.8	11.6	8.1	11.2	28.2	39.4	3.8	2.6	20.5	13.0	40.0	1.0
Brazil														
1950	7.5	6.7	6.1	12.8	12.2	6.5	26.1	32.6	3.3	9.4	18.4	10.9	42.0	0.4
1955	5.6	7.4	1.8	9.2	21.0	6.3	31.5	37.8	3.3	3.3	15.7	9.5	31.8	0.2
1960	5.7	5.4	1.5	6.9	17.5	6.6	32.0	38.7	2.1	4.6	14.3	15.7	36.8	0.1
1961	5.2	6.2	1.4	7.6	18.0	7.6	31.9	39.5	2.8	3.2	18.9	9.7	34.6	0.3
1962	4.9	6.9	1.0	7.9	18.6	7.8	35.0	42.8	2.0	2.3	19.5	6.5	30.3	0.4
Chile														
1950	11.2	10.0	2.1	12.2	8.7	5.7	35.8	41.6	6.8	1.5	22.6	6.3	37.2	0.2
1955	11.6	10.4	2.8	13.2	13.8	3.4	37.3	40.7	3.5	4.7	14.6	9.4	32.2	0.1
1960	14.0	14.7	4.1	18.8	8.9	3.0	35.1	38.2	3.4	2.3	17.0	10.8	33.5	0.5
1961	16.4	13.9	4.3	18.2	5.7	2.8	36.8	39.6	3.8	4.9	16.1	11.3	36.1	0.4
1962	12.8	15.5	4.3	19.8	5.4	2.8	34.5	37.3	4.9	2.1	18.6	11.0	36.6	0.9
Colombia														
1950	10.9	14.6	6.7	21.3	2.4	4.0	30.9	35.1	6.9	5.8	19.0	9.1	40.9	0.2
1955	13.0	10.0	7.1	17.1	3.7	4.2	27.2	31.4	7.8	5.6	22.5	11.4	47.3	0.5
1960	9.0	7.4	3.6	11.0	1.9	6.9	38.1	45.2	4.8	6.6	23.0	6.5	40.9	0.9
1961	9.0	9.5	6.5	16.0	1.7	6.1	37.1	43.2	5.5	5.6	21.8	4.8	37.8	1.3
1962	8.4	8.3	4.1	12.4	1.7	7.0	39.3	46.3	4.8	6.2	20.1	6.9	38.0	1.6
Mexico														
1950	11.5	8.3	7.5	15.8	4.1	10.5	28.9	39.4	7.8	4.6	23.0	4.5	40.2	0.5
1955	10.6	7.0	8.4	15.4	7.9	10.4	26.8	37.2	5.9	5.0	22.7	5.7	39.3	0.2
1960	9.6	6.6	5.5	12.1	4.1	11.4	33.0	44.4	4.4	3.2	24.0	7.5	39.1	0.3
1961	9.2	6.8	6.0	12.8	3.6	14.2	30.7	44.9	3.7	2.9	24.5	3.8	34.9	3.8
1962	8.6	7.6	5.6	13.2	2.5	14.5	33.0	47.5	4.1	1.8	22.5	4.3	32.7	4.1
Peru														
1950	13.0	21.5	5.8	27.3	1.8	3.9	24.2	28.1	4.9	4.7	18.8	13.8	42.2	0.6
1955	16.5	17.4	9.6	27.0	3.1	5.0	24.0	29.0	8.1	4.5	19.7	7.4	39.7	1.2
1960	14.3	15.3	8.9	24.2	4.9	5.3	27.5	32.8	5.1	3.0	18.8	10.8	37.7	0.4
1961	16.3	14.9	10.4	25.3	3.5	5.0	25.5	30.5	5.9	3.2	20.1	11.2	40.4	0.3
1962	17.2	13.0	10.3	23.3	3.2	4.6	26.4	31.0	6.2	4.6	20.6	10.6	42.0	0.5
Central America														
1950	15.5	28.3	9.4	37.7	7.0	2.3	19.1	21.4	5.9	2.4	8.2	4.1	20.6	13.3
1955	18.3	28.3	11.6	39.9	6.7	2.4	23.4	25.8	7.5	3.9	11.0	4.4	26.8	0.8
1960	17.5	26.4	10.6	37.0	7.8	2.6	26.5	29.3	6.8	2.5	11.3	4.0	24.6	1.3
1961	16.0	26.5	9.4	35.9	8.0	2.9	29.3	32.2	6.7	2.6	10.3	3.4	23.1	0.8
1962[b]	16.8	25.1	8.7	33.8	7.4	2.5	30.1	32.6	8.0	2.9	11.1	3.4	25.4	0.8
Venezuela														
1950	22.3	25.8	5.4	31.2	1.2	4.7	14.9	19.6	7.7	2.7	20.6	6.9	37.9	10.1
1955	20.2	18.4	6.5	24.9	1.2	4.1	14.9	19.0	7.5	3.0	26.2	7.9	44.6	10.3
1960	14.9	24.1	7.2	31.3	0.8	5.9	19.3	25.2	6.4	1.8	14.9	6.0	29.1	13.6
1961	14.3	24.9	7.0	31.9	0.5	6.6	21.6	28.2	4.8	1.5	13.5	4.8	24.6	14.8
1962	12.6	23.1	6.4	29.5	0.5	6.6	23.0	29.6	4.8	1.8	13.1	4.6	24.3	16.0

SOURCE: ECLA, on the basis of official statistics.

[a] Excluding Cuba.

[b] Excluding Guatemala.

materials) and 36.2 per cent of capital goods. These wo major categories of imports also underwent important modifications. If the analysis is limited to recent years, it will be seen that the share of industrial machinery and equipment increased, while that of agricultural machinery and equipment shrank. After 1960 there was an intensive re-equipment process in Argentina and an expansion in industrial capacity, which led to he marked increase in imports of capital goods revealed by the pertinent figures. The share absorbed by transport machinery and equipment rose to 13.0 per cent of he total in 1962, largely as a result of the process of replacement undertaken by the transport sector on the basis of equipment from abroad. As regards intermediate goods, the proportion of imports of metal products tended to dwindle and that of non-metallic products to increase, since the substitution process was relatively more intense for the first than for the second.

In 1960–62, there was an intensification of the structural modifications that have been taking place in Brazil's imports for some years. The share of fuels and, in particular, of intermediate goods continued to increase. In 1963 the latter accounted for 44.8 per cent of total imports (including building materials) in comparison with 40.8 per cent in 1960 and 35.9 per cent in 1950, an increase that was largely determined by non-metallic intermediate goods. The progress made in industrial production of durable consumer goods, especially motor vehicles, is expressed by the sharp contraction in imports of these goods, which shrank to only 1 per cent of the total in 1962. With regard to capital goods, it is clear that the shares of transport and agricultural machinery and equipment were dwindling, since in 1963 they represented 6.5 per cent and 2.3 per cent respectively, against 15.7 per cent and 4.6 per cent in 1960.

Over the three-year period covered by the analysis in table 34, the share of capital goods in total imports underwent a continuous decline in Mexico. In 1960 it was 34.7 per cent and shrank to 28.6 per cent in 1962. By contrast, the share of intermediate metal products increased from 11.4 per cent in 1960 to 14.5 per cent in 1963, while non-metallic intermediate goods recovered the proportion of total imports (33 per cent) they had constituted in 1960. Thus, 51.6 per cent of Mexico's imports were made up of intermediate goods for building and for economic activities in general. Lastly, it should be noted that durable and non-durable consumer goods have kept their share at 12 to 13 per cent since 1960.

Broadly speaking, then, the three countries analysed, which are among the most industrially developed in Latin America, have acquired an import structure of which approximately more than half consists of intermediate goods and fuels and a third—or even more in Argentina—of capital goods, while consumer goods range from a minimum of 8 per cent in Brazil to 13 per cent in Mexico.

Venezuela is the other Latin American country with relatively high imports. They have a distinctive composition, the evolution of which tends in some respects to follow the same pattern as in Argentina and Brazil. Thus, the most significant fact is the increase in the share of intermediate goods, especially of non-metallic products. Nevertheless, Venezuela's import structure differs considerably from that of the other two countries. In fact, in 1962, consumer goods accounted for the high proportion of 30 per cent, whilst capital goods tended to decline to less than 20 per cent, apparently as a result of the contraction of petroleum investment.

For Central America, the 1962 figures show that the percentage of consumer goods declined somewhat while that of intermediate goods and fuels expanded. The imports of this group of countries are, in common with those of Venezuela, characterized by the high proportion of consumer goods. In 1962, this category constituted 33.8 per cent of the total—or much less than in previous years—intermediate goods and building materials tended to increase their share, together accounting for 40.6 per cent, whilst capital goods represented 17.4 per cent and fuels 8.0 per cent.

This general survey will be concluded by a review of the evolution of the import structure in Peru, Colombia and Chile. Peru's import structure is also notable for its high proportion of consumer goods. In 1962 these accounted for 23.3 per cent of the total, intermediate goods (including building materials) representing 37.2 per cent and capital goods 35.8 per cent. In comparison with the import structure in previous years, the share of durable consumer goods is seen to have shrunk and that of intermediate metal products to have expanded. Hence, the general lines along which import composition evolved in Latin America were echoed in Peru, although on a different level from the other Latin American countries.

In the last few years certain changes have taken place in Colombia's import structure, mainly in respect of consumer goods. In 1962 consumer goods represented 12.4 per cent of total imports, whereas in 1959–60 their share had been only 10.8 per cent. The increase was partly attributable to imports of durable goods, which had been heavily restricted in previous years. As far as the remaining categories are concerned, intermediate goods (including building materials) maintained their substantial share of 51.1 per cent, while that recorded for capital goods was 33.2 per cent, i.e., less than in 1960 (36.1 per cent).

Finally, this analysis of import composition shows that in Chile the share of consumer goods has continued to increase. In 1962 imports of this kind represented almost 20 per cent of the total, as against 12.2 per cent and 13.2 per cent in the early years of the fifties (1950 and 1955 respectively).

Part Two
SECTORAL EVOLUTION

Chapter III

AGRICULTURE

1. Introduction

The evolution of the agricultural sector in Latin merica revealed no appreciable changes in the four ars under consideration. The volume of production as slightly more than in 1958, but this improvement as cancelled out by the increase in population. So uch so that in the three-year period 1960–62 agricul-ral production *per capita* not only failed to improve on its 1958 figure but even fell slightly below it. If e comparison is made with the pre-war period, the tuation takes an even more unfavourable turn, in that e *per capita* decrease in production becomes about 8 r cent. This is indicative of a marked relative decline Latin America's agricultural output, since in the e-war period—almost a quarter of a century—world ricultural production expanded by about 10 per cent r head.[1]

From table 35 it can be seen that the low level of total ricultural output was mainly attributable to the fall livestock production, which offset the increase in crop oduction. The salient factors responsible for this situation are described in the section on livestock products. At this juncture it will suffice to point out the extreme gravity of the situation, which has not only slowed down the growth of agricultural income and reduced exportable surpluses, but has also prevented any satisfactory improvement from being made in the low nutrition levels of the great mass of the Latin American people.

Table 35. Latin America: Quantum of crop and livestock production
(*Index: 1958=100*)

	1950	*1959*	*1960*	*1961*	*1962*[a]
		A. Total			
Crop and livestock production	*74.6*	*104.4*	*104.3*	*108.5*	*108.2*
For domestic consumption	72.9	102.3	107.4	112.0	114.5
For export	76.6	106.9	100.9	104.6	101.3
Crop production	*72.7*	*107.7*	*107.9*	*112.1*	*111.2*
For domestic consumption	72.0	102.9	110.0	114.9	117.5
For export	73.6	113.5	105.4	108.8	103.7
Livestock production	*82.4*	*91.2*	*89.9*	*93.9*	*95.8*
For domestic consumption	77.2	99.1	94.9	98.2	100.2
For export	86.8	84.3	85.6	90.2	92.0
		B. Per capita			
Crop and livestock production	*93.0*	*101.5*	*98.6*	*99.7*	*96.7*
For domestic consumption	90.9	99.4	101.5	102.9	102.3
For export	95.5	103.9	95.4	96.1	90.5
Crop production	*90.6*	*104.7*	*102.0*	*103.0*	*99.4*
For domestic consumption	89.8	100.0	104.0	105.6	105.0
For export	91.8	110.3	99.6	100.0	92.7
Livestock production	*102.7*	*88.6*	*85.0*	*86.3*	*85.6*
For domestic consumption	96.3	96.3	89.7	90.3	89.5
For export	108.2	81.9	80.9	82.9	82.2

Source: ECLA, on the basis of official statistics. [a] Provisional figures.

It is also apparent that agricultural production for export[2] lagged well behind production for the home market.[3] In fact, in 1962, it was about 7 per cent less in *per capita* terms than in 1958 and 1961. Larger harvests of maize, rice, beans, peas, lentils and sesame, among other crops, led, during the three-year period 1960–62, to an increase in *per capita* production for the domestic market of about 5 per cent over the figure for 1958.

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[1] FAO, *The State of Food and Agriculture 1963*, Rome, 1963, le II-B.

[2] Comprising the following commodities and countries: wheat and linseed from Argentina and Uruguay; maize from Argentina; coffee from all countries; sugar from Cuba, the Dominican Republic and Peru; cotton fibre from Brazil, Mexico, Nicaragua and Peru; bananas from Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Mexico and Panama; cacao from Brazil, Ecuador and Venezuela; sisal from Brazil and Mexico; tobacco from Cuba and castor oil from Brazil.

[3] Consisting of the remaining agricultural commodities.

In the case of livestock products a similar trend can be observed. Production for domestic consumption remained practically stationary in 1958–62, except for a small drop in 1960, whilst that for export[4] fell about 15 per cent below its 1958 level in 1959 and 1960, recovering slightly in 1961 and 1962. As indicated by the more detailed information in the relevant section, livestock production, especially that of red meat, increased considerably in 1963 to the point of regaining the level achieved in 1958. Despite this improvement, however, *per capita* production was 10 per cent less than in that year.

Table 36. Latin America: Gross agricultural product in selected countries

Country	*Annual growth rate between 1950–52 and 1960–62*		*Gross agricultural product as a percentage of total gross product*	
	Gross agricultural product	*Total population*	*1950–52*	*1960–62*
Argentina	1.8	1.9	18.3	16.1
Brazil	4.7	3.1	28.3	24.9
Chile	2.3	2.3	11.9	11.0
Colombia	3.3[a]	2.9	39.4	34.2[b]
Costa Rica	3.6[c]	4.2	44.5[d]	32.9
Ecuador	3.8[e]	3.1	43.6	39.9[f]
El Salvador	2.7[g]	2.8	46.4[d]	38.0
Guatemala	2.7[c]	3.0	37.3[d]	34.2
Haiti	1.1[g]	2.1	56.6	54.4[h]
Honduras	2.5[c]	3.2	50.1[d]	43.8
Mexico	4.3	3.2	23.1	20.1
Nicaragua	4.1[c]	3.4	45.7[d]	37.2
Panama	4.6	2.8	24.9	24.4
Peru	3.7	2.4	25.4	22.1
Venezuela	5.1	4.0	8.6	7.2

SOURCE: ECLA, on the basis of official statistics.
[a] 1950–52 to 1961–63.
[b] 1961–63.
[c] 1950 to 1960–62.
[d] 1950.
[e] 1950–52 to 1959–61.
[f] 1959–61.
[g] 1950–52 to 1958–60.
[h] 1958–60.

Table 35 conceals important discrepancies in the trends of livestock production in the different Latin American countries. Thus, in Brazil, Panama, Mexico, Peru and Venezuela, the gross agricultural product's rate of increase during the decade 1950–52/1960–62 was approximately 1 per cent more than that of the population, whereas, in most of the other countries, population growth outstripped that of production. This unequal development is shown in table 36, which groups together fifteen Latin American countries. It can also be seen that in most of these the agricultural sector still contributes about one-third or more of the over-all gross product.

2. CROP PRODUCTION

As has already been indicated, crop production proper in Latin America has been recently increasing at a much swifter pace than the population. The expansion has taken place in all commodity groups, although to differing degrees (see table 37). Thus, stimulants (coffee, cacao, maté and tea) rose 18 per cent above their 1958 level in the three-year period 1960–62, whilst cereal production went up by only 8 per cent. Other groups showing significant increases were oil seeds (17 pe cent), fibres (15 per cent) and vegetables (14 per cent).

Table 38. Latin America: Area production and yield in respect of four major commodities, 1960–62

(*Index: 1950–52=100*)

Commodity	*Area*	*Production*	*Yield*
Wheat[a]	91	106	116
Maize	145	166	114
Rice	161	168	104
Beans	140	152	109

SOURCE: ECLA, on the basis of official statistics.
[a] For Argentina the two-year period 1950–51 was taken as the base, since 1952 was an exceptionally poor year.

Table 37. Latin America: Quantum of crop production, by main commodity groups

(*Index: 1958=100*)

Commodity	*1950*	*1958*	*1959*	*1960*	*1961*	*1962*
Cereals	71	100	107	108	105	112
Roots and tubers	79	100	100	108	114	99
Dried leguminous vegetables	80	100	106	111	121	109
Oil-seeds	75	100	88	108	108	136
Sugar	72	100	102	107	111	96
Fruit	72	100	107	109	111	113
Beverages (non-alcoholic)	69	100	115	133	105	116
Fibres	72	100	95	106	116	123
Wine	89	100	119	109	120	137

SOURCE: ECLA, *Statistical Bulletin for Latin America*, vol. I, No. 1, Santiago, March 1964.

Full data are not available to enable indexes to be worked out for 1963. Partial information on certai products and countries will be given in chapter VIII.

One of the outstanding features of Latin America' crop development in the fifties was the meagre increas in average yield, which can be attributed to the lack o tisfactory technological progress made in the region. ith the exception of cotton and wheat, in respect of hich some producing countries have effected substantial nprovements, any increase in output generally derived om an expansion in the crop area. In the case of three ut of the four staple commodities listed in table 38, creases in area were the decisive factor in raising the vel of production. Wheat was the only crop whose production level in the fifties was surpassed in 1960–62, despite a reduction of 9 per cent in the crop area, the reason being the improvements in yield achieved in Argentina and Mexico.

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[4] Cattle, sheep and swine from Argentina, Mexico and Uruguay, and wool from Argentina and Uruguay.

Table 39. Latin America: Crop yield in selected countries

(Kilogrammes per hectare)

Country	Wheat		Maize		Rice		Beans	
	1950–52	*1960–62*	*1950–52*	*1960–62*	*1950–52*	*1960–62*	*1950–52*	*1960–62*
Argentina	1,120[a]	1,326	1,060	1,790	3,100	3,345	794	969
Brazil	752	702	1,270	1,305	1,607	1,658	669	660
Chile	1,143	1,287	1,377	2,013	2,687	2,773	917	957
Mexico	884	1,569	748	934	1,749	2,053	240	400

SOURCE: ECLA, on the basis of official statistics.

[a] 1950–51.

Table 40. Latin America and world average: Yields of selected agricultural commodities

(Quintals per hectare)

Commodity	World		Percentage increase	Latin America		Percentage increase[a]
	1948–52	*1961/62*		*1948–52*	*1961/62*	
Wheat	10.1	11.7	16	10.5	11.4	9
Barley	11.3	13.7	21	10.6	10.3	−3
Oats	11.6	13.6	17	10.3	10.8	5
Maize	15.8	20.8	32	10.6	11.8	11
Rice	16.0	20.3	27	16.9	18.4	9
Cotton	2.4	3.1	29	2.1	2.9	38

SOURCE: FAO, *Production Yearbook, 1962.*

[a] The apparent discrepancies between this and table 39 are due to the use of a different period of comparison.

Table 41. Fertilizer consumption in selected countries of Latin America and other regions

(Tons per thousand hectares of arable land)

	1950			*1961*		
	N	P_2O_5	K_2O	*N*	P_2O_5	K_2O
Latin America	*1.07*	*1.19*	*0.48*	*4.08*	*2.62*	*2.33*
Brazil	0.52	1.31	0.42	3.38	3.96	5.56
Chile	1.21	2.61	0.28	4.53	5.37	2.94
Mexico	0.17	0.22	0.04	6.77	2.14	0.45
Peru	22.19	13.93	3.67	21.61	11.24	2.97
Western Europe	*13.80*	*21.23*	*17.22*	*30.72*	*33.94*	*32.23*
Federal Republic of Germany	37.87	38.84	68.14	72.34	76.25	117.66
France	10.65	17.51	16.78	26.39	40.99	35.03
Italy	7.78	16.06	1.04	21.01	23.93	6.55
United Kingdom	28.14	55.58	32.15	62.90	57.22	60.04
North America	*4.39*	*8.96*	*4.89*	*12.57*	*11.37*	*9.16*
United States	5.06	10.12	5.52	14.82	12.94	10.61
Asia	*2.62*	*1.50*	*0.65*	*6.05*	*2.70*	*2.89*
Japan	50.58	38.82	20.03	124.03	80.88	98.77

SOURCE: FAO, *The State of Food and Agriculture, 1963,* annex, table 22.

The improvements in yield and their absolute levels vary appreciably from one country to another. In the case of wheat, maize, rice and beans and some of the major producing countries, there was utter stagnation in

Brazil, for instance, whereas Mexico, in complete contrast, achieved substantial improvements in all four commodities, especially wheat, mainly owing to irrigation programmes, an adequate supply of selected seeds, more intensive use of fertilizers and various kinds of technical assistance. Progress was also maide n Argentina and Chile, particularly in the case of maize, thanks to the introduction of new varieties (see table 39).

If Latin America's position is compared with that of the world as a whole, it will be seen that the region not only lagged behind in relative terms, but also that, in the majority of cases, absolute yield was lower than the world average. In a period in which other regions—particularly the most developed—drew extensively on the resources made available to them by modern technology, in Latin America progress was very slow. Table 40 shows the trends followed by six commodities between the five-year period 1948–52 and the crop year 1961/62. There it can be seen that the increases in respect of all commodities other than cotton were much smaller than the world averages and that, in one case, barley, there was even an absolute decrease.

The factors which determine agricultural yield are many and complex. It would be impossible on this occasion to list them in full detail, and it would be equally long and burdensome to give a precise enumeration of all the reasons for the technical backwardness of Latin American agriculture. Nevertheless, by way of illustration, it is worth while to study a factor that is particularly influential in determining yield, namely, the use of fertilizers. In table 41 it can be seen that, despite increased consumption of fertilizers by the Latin American countries between 1950 and 1961, its utilization per hectare of arable land is still much lower than in the majority of European countries, the United States, and Japan and other Asian countries.

Although some progress has obviously been made, it is clear that Latin America still has a long way to go to reach the levels of fertilizer consumption that are usual in more agriculturally advanced countries. A wide range of closely related measures and policies are required for both fertilizers and other technical improvements if the results required by the growing demand for agricultural commodities in Latin America are to be achieved.

3. LIVESTOCK PRODUCTION

An analysis of the changes that have recently taken place in Latin America's livestock production shows that, even though aggregate production increased to some extent in certain years, it did so less rapidly than the population, thereby reducing *per capita* production. This unfavourable tendency has been apparent for over ten years and has been accentuated recently, at least in comparison with its evolution in the fifties. Hence it is of great importance to analyse the causes as well as the magnitude of the changes in the different production items, and to ascertain individual country trends.

According to the indexes of livestock production,[5] the total quantum remained completely stationary between 1950 and 1954, although at a slightly higher level than in the preceding quinquennium. Subsequently, in the period 1955–58 a significant increase was recorded, especially in 1958, followed by a decline between 1959 and 1962, and the recovery in 1963 of the 1958 level (see table 42).

Table 42. Latin America: Total and *per capita* livestock production[a]
(*Index: 1958=100*)

Year	*Latin America*		*Latin America, excluding Argentina*		*Argentina*	
	Total	Per capita	*Total*	Per capita	*Total*	Per capita
1950 . .	82	103	80	100	86	101
1951 . .	81	99	84	102	78	90
1952 . .	81	96	84	100	77	86
1953 . .	80	92	86	100	72	79
1954 . .	80	90	85	96	74	80
1955 . .	85	93	85	92	86	91
1956 . .	92	98	89	95	97	101
1957 . .	96	100	95	98	99	101
1958 . .	100	100	100	100	100	100
1959 . .	91	89	99	96	80	78
1960 . .	90	85	98	92	80	78
1961 . .	94	86	101	93	85	81
1962 . .	96	86	98	88	88	82
1963[b] . .	100	90	103	92	90	84

SOURCE: ECLA, Statistics Division.
[a] At constant 1948 prices. Covering beef, mutton, pork and wool.
[b] Provisional indexes.

As a result, total *per capita* livestock production declined almost continuously. In fact, from 1951 onwards the level was visibly below that for 1945–50, except in 1957 and 1958. In the following years (1959–63), with which the present analysis is mainly concerned, the decline in *per capita* production was particularly marked, the average being 12 per cent below the 1958 level.

A study of the situation and trends of livestock production by commodities and countries shows that they stagnated or declined in a number of countries whose economies are heavily dependent on that branch of activity. In a few, livestock production undeniably increased in both aggregate and *per capita* terms, but the volume of the increase was insufficient to compensate for the check or decrease recorded in others.

In dealing with the past and present trends of livestock production in Latin America it is advisable for meat production to be analysed in more detail, in view of its importance within the livestock industry and the significant role it plays in the economy of all the Latin American countries. In each one, in fact, the greater part of the farmland is devoted to raising livestock for meat, and without exception the supply of this commodity is vitally important from the nutritional point of view. Moreover, regular exports of meat and meat products are still an important source of income to several Latin American countries.

However, in spite of the meat industry's importance, production remains stationary in the majority of the Latin American countries and even shows signs of declining in some, although there are sufficient natural resources for it to expand in comparatively advantageous conditions. It can justifiably be asserted without any exaggeration that the region possesses optimum conditions for a far greater development of meat production ıder the present system of extensive exploitation. The ıestock policy which has prevailed up to now must erefore be remodelled and activated with a view, on e one hand, to solving the manifold technical problems mpering production, and, on the other, to bringing ɔout full use of the resources and means without which ch production cannot be stimulated.

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[5] Cattle, sheep and swine for meat and wool production, at 1948 prices.

Table 43. Latin America: Total and *per capita* red meat production[a]

untry	Total (*thousands of tons*)[b]					Per capita (*kilogrammes*)				
	1948–50	*1960*	*1961*	*1962*	*1963*	*1948–50*	*1960*	*1961*	*1962*	*1963*
rgentina	2,367	2,242	2,498	2,536	2,620	141	107	117	117	118
olivia[c] . . .	59	62	63	63	65	20	17	17	16	16
razil	1,421	1,855	1,881	1,914	2,028	27	26	26	26	26
hile	198	182	198	196	205	35	24	25	24	25
olombia	331	394	422	457	425	29	25	26	27	25
cuador	37	59	61	63	70	12	14	14	14	15
exico	203	554	674	695	728	8	16	19	19	19
araguay[c]	79	92	90	91	92	58	52	50	48	48
eru[c]	79	139	151	158	164	9	14	15	15	15
ruguay	358	297	333	343	363	151	110	132	134	140
enezuela	65	146	159	166	173	14	20	21	21	21
thers	273	327	337	348	402	14	13	13	13	17
TOTAL	5,470	6,349	6,867	7,030	7,335	36	31	32	33	34

SOURCES: Official statistics on slaughtering and/or meat production ıd calculations based on figures for slaughtering and carcass meat yield.

Note: Some figures include goat's meat.

[a] Meat obtained from cattle, sheep, goats and pigs in terms of carcass eat. The product of unregistered slaughtering and slaughtering *in situ* not included.

[b] Provisional figures, taken from United States Department of Agriculture, *Indices of Agricultural Production of the 20 Latin American countries*, 1963, except for Bolivia.

[c] Subject to revision.

It has already been said—and can never be repeated too ften—that *per capita* meat consumption is very low ndeed in the majority of Latin American countries and vill become even lower with the rapid growth of the opulation unless special measures are taken to ensure greater supply. With the exception of one or two, the atin American countries are wasting the economic pportunities that meat production on a larger scale vould signify, given the growing demand for meat in he region itself and on the international market.

According to table 43 production of red meat in Latin merica comes to slightly more than 7 million tons, which is equivalent to 14 per cent of the output of the orty-four principal meat-producing countries in the vorld. Argentina, Brazil, Colombia, Mexico and Uruuay are the main Latin American producers, and toether account for 84 per cent of the region's output. atin America's aggregate *per capita* production was bout 33 kg in recent years. As may be observed, the ndividual country figures differ considerably, ranging om those of the River Plate area, where output is more han 100 kg *per capita*, to those of Central America, here it is less than 15 kg. Consequently it is advisable or the changes to be analysed later by countries.

With respect to recent variations and trends in prouction, the volume of output has been slow to expand, gging behind population growth, and this has brought bout a decline in *per capita* production from an annual verage of 36 kg in the three-year period 1948–50 to 2 kg in 1960–63.

In general, the most important production item is beef, which constitutes about 75 per cent of the total volume, some 17 per cent being accounted for by pork and the remaining 8 per cent by mutton. Over the long term the share of pork has become larger, but is still very moderate in absolute terms. The percentage distribution by species of livestock differs appreciably from that in other parts of the world, as, for example, the United States or Europe, where the pork supply is much larger (40 and 50 per cent respectively) and that of mutton relatively less.

About 90 per cent of the total volume of red meat production is destined for the home market and only 10 per cent is exported. On the whole, these proportions have tended to remain the same, except for some changes caused by sharp fluctuations in exports from Argentina in certain years. The majority of countries use their entire output for internal consumption, the only exporters being Argentina, Brazil, Mexico, Paraguay and Uruguay. Moreover, part of the production in Argentina, Central America and Mexico is exported in the form of cattle-on-the-hoof for more or less immediate consumption in other countries (see table 44).

In order to complete the study of livestock production trends in Latin America, it is essential to examine the changes in individual countries, especially Argentina, Brazil, Colombia, Mexico and Uruguay, because of their incidence on over-all production indexes, particularly Argentina, which largely determines the fluctuations in those indexes. This is, of course, the result of the sizable contribution made by this country to Latin American meat production; although less than before, it is still equivalent to 38 per cent of the regional total.

In fact, the substantial increase shown by the general indexes of Latin American livestock production for 1956, 1957 and 1958 (see figure XXV) are mainly attributable to the higher rate of cattle slaughtering in Argentina in those years, which, in 1958, reached the record figure of 12.3 million head as against 10 million in 1955. This increase should not, in itself, be interpreted as a rise in production, since it derived from the partial liquidation of stocks, including the unduly heavy slaughtering of cows and heifers suitable for breeding, which persisted, though to a less damaging extent, up to 1959.

Table 44. Latin America: Red meat production by destination, 1960–62

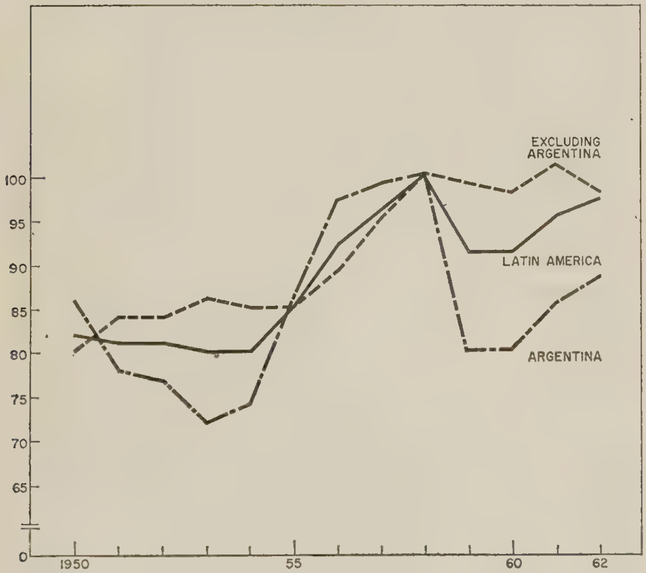
	1960		*1961*		*1962*	
	Thousands of tons	*Percentage*	*Thousands of tons*	*Percentage*	*Thousands of tons*	*Percentage*
Domestic consumption	5,770	91	6,280	91	6,333	90
Export[a]	579	9	587	9	697	10
TOTAL	6,349	100	6,867	100	7,030	100

SOURCES: Table 35 and United States Department of Agriculture, *World Agricultural production and trade*, August 1963, for export figures.

[a] Exports of chilled, prepared and canned meat from Argentina, Brazil, Mexico and Uruguay, in terms of carcass meat.

In 1956–59, the annual slaughter of dams averaged 41 per cent of the total volume of slaughtering, which is much higher than the traditional average of 36 per cent. This unusual increase in slaughtering was due to the fall in livestock prices in 1956–58 as a result of the freeing of prices of cereals and oil-seeds. Towards the end of 1958 a change was made in the exchange rate that favoured stock farming and considerably reduced the slaughter of dams from 1959 onwards. Owing to the excessive slaughter of dams, cattle stocks went down from 46.9 million head in 1956 to 41.2 million in 1959, that is, by 5.7 million head in only three years.

Figure XXV. Latin America: Livestock production, 1950–62[a]
(INDEX: 1958=100)
Natural scale



SOURCE: ECLA, Statistics Division.

[a] At constant 1948 prices. Covers beef, mutton, pork and wool.

In 1960, as a result of factors favouring stock farming—foremost among them an upswing in the terms of trade that reached its peak in 1959—dams were withheld from slaughter and cattle stocks consequently increased to 43.5 million head. But this recovery was short-lived because of the severe drought that began in Argentina towards the end of 1960 and, during 1961 and 1962, gravely affected its agricultural production. The shortage of fodder led to unnecessarily heavy slaughtering of cattle that far outstripped the figures for the two preceding years (1959 and 1960), largely at the cost of the dams which once again constituted a large proportion of the total number of slaughterings. The upshot was that herds declined to 43.2 and 43.3 million head respectively. The increase in the supply of beef was plainly responsible for the deterioration in prices, which became unfavourable in comparison with those of agricultural commodities.

Mutton production remained relatively high during the drought, as did wool output, their topmost peaks being reached in 1960 and 1961, and a secondary peak in 1962.

Because of the importance attaching to meat production in Argentina from the point of view of exports, some features of its distribution should be considered. The figures in table 45 reveal fundamental changes in this respect: before and during the Second World War a substantial proportion of the output (37 and 34 per cent) was exported without detriment to the domestic supply, since *per capita* consumption was then slightly more than it is now.[6] Ten years later, between 1951 and 1954, cattle slaughtering decreased considerably and meat exports reached their lowest levels, in both absolute and relative terms. Exports later made a good recovery, but as the figures for 1960–62 show, Argentina has recently been obliged to reserve a far larger proportion of its total production—about three-quarters—for the internal market.

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[6] *Per capita* consumption of red meat in Argentina:

Year	*Kilogrammes*
1934–38	86
1941–44	92
1951–54	99
1960–62	84

Vith regard to milk, the quantum indexes for Argen- a show a marked stagnation in total output, and a line in *per capita* production and supplies. While k production remained stationary between 1953 and 3 the population of the country grew by almost 12 cent.

Table 45. **Argentina: Red meat production in selected periods by destination**[a]

	1934–38		*1941–44*		*1951–54*		*1960–62*	
	Thousands of tons	*Percentage*	*Thousands of tons*	*Percentage*	*Thousands of tons*	*Percentage*	*Thousands of tons*	*Percentage*
Domestic consumption .	1,210	63.1	1,356	55.7	1,816	84.7	1,804	74.4
Export . .	670	36.9	917	44.3	328	15.3	621	25.6
TOTAL	1,917	100.0	2,273	100.0	2,144	100.0	2,425	100.0

SOURCE: National Meat Board.
[a] Meat obtained from cattle, sheep and pigs, in terms of carcass meat.

It must be pointed out that the 1961 and 1962 drought Argentina had all the characteristics of a national aster. According to official estimates,[7] losses amounted 8,525 million Argentine pesos for livestock and 7,577 llion for crops, that is, the equivalent of nearly 200 llion dollars at the official rate of exchange in force at e time. As regards livestock, the Province that suffered e heaviest losses was Buenos Aires with 85 per cent. e damage wrought by the drought in the three Provces most severely affected included the death and loss of nost 1.2 million head of cattle and 5 million sheep, that 7 and 20 per cent of the stocks respectively. Wool ses are estimated at 19.8 million kg.

Finally, in 1963, Argentina's livestock industry began make good progress, a 3 per cent increase being corded in meat production without any reduction in ttle stocks, as in the past.

The situation of its livestock industry during recent ars may be summed up as follows: (*a*) a crisis in 1956– , when the unduly heavy increase in slaughtering made vere inroads on cattle herds. One of the causes of the isis was the discouraging price and export policy preiling at the time; (*b*) a temporary replenishment of rds lasting from the beginning of 1959 up to the end 1960, combined with the holding-back of dams and consequent decrease in the rate of extraction for ughter which partially made up for the liquidation of ttle stocks that had taken place. This upswing was couraged by economic measures favouring livestock oducers, such as the modification in the exchange rate d the freeing of stock prices; (*c*) a crisis in 1961 and 62 as a result of prolonged droughts over a vast stockrming area, which led again to the liquidation of stocks d thereby stopped the favourable cycle of natural owth that had begun in 1959; (*d*) signs of recovery in 63.

In Brazil, the second most important livestock producer in Latin America, the indexes of meat and wool production rose during the period 1956–59, although the improvement was largely due to the slaughter of dams. In the next few years production levels remained fairly high, but were still below those recorded in 1958 and 1959, and the *per capita* production index fell. Milk production, however, became greater every year, in both absolute and *per capita* terms. On the whole Brazil's livestock production has made great progress in recent years, particularly in the central zone.

Mexico also saw important advances made by its livestock industry in recent years, as much in meat and milk as in wool, particularly from 1960 onwards. The production index for mutton was high from 1960 to 1963, while the index for wool production reached unprecedented figures in 1959 and 1960, only to decline sharply in 1961.

Colombia, which ranks fourth as a meat producer in Latin America, has been steadily developing its cattle and swine production since 1960, after a period of stagnation between 1956 and 1959. On the other hand, sheep farming, which is of little importance there, still shows relatively low figures for both meat and wool production.

Although Brazil, Colombia and Mexico are visibly increasing the volume of their livestock production, the improvement is mainly due to an increase in the actual number of animals, since scant progress has been made in raising productivity per animal or per unit of area employed. This may also be said of the other Latin American countries.

The livestock situation in Uruguay is not very encouraging since production indexes have been low for over a decade. In fact, the total livestock index declined from 130 in 1950 to 103 in 1962, which means that the over-all volume of production was reduced by one fourth. The falling off was particularly marked in the case of meat. Nevertheless, in 1963, production recovered somewhat, largely owing to the campaign for pasture improvement. Sheep production has remained at a relatively high level since the beginning of the sixties, but the average production index is below that for the decade 1950–60.

In Chile and Paraguay—as in Argentina and Uruguay —cattle farming has evolved unfavourably over the long run, since *per capita* meat production, for example, is much less than in 1948–50. For Paraguay, this has meant a reduction in the amount available for export, and, for Chile, greater dependence on imports. Peru and Venezuela have recorded sustained increases in total and *per capita* livestock production, particularly for meat in Venezuela and meat and wool in Peru. In Central America, meat production has shown signs of stagnation, while the dairy industry has made moderate progress.

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[7] Calculations of losses in the Provinces of Buenos Aires, La mpa and Rio Negro made in January 1963 by the National partment of Agriculture and Livestock.

The obstacles to livestock development are fairly numerous and of widely differing kinds. In the temperate-zone countries (Argentina, Chile and Uruguay), the reserves of land that can economically be reclaimed for stock farming are practically exhausted. Increases in production can therefore only be achieved through a rise in productivity, which, in its turn, requires the introduction of modern techniques, and through the adoption of a livestock policy that would act as a satisfactory and sustained incentive to producers. Unfortunately, progress has been very slow on both fronts while demand has been expanding, and this has tended to widen the gap between demand and supply.

In other countries the difficulty derives not from the amount of land available but from the low technical level of farming, the rudimentary practices of animal husbandry used, inadequate control of animal diseases, in many cases adverse economic factors, and the existence of obstacles of an institutional nature, such as the extremely slow progress made by the agencies responsible for research, extension services, vocational training and the provision of livestock credits. It is highly regrettable that these valuable means of promotion should be at such a low level in practically all the Latin American countries.

Among the technical factors hampering the development of livestock production, special attention should be given to those which affect beef cattle production, in particular the shortcomings in cattle feed and the rudimentary methods of fattening used. Virtually all the Latin American countries suffer from seasonal fodder shortages, either in the dry periods of the year or during the winter in the temperate zone. Few Latin American stock farmers make use of systems of fodder conservation and storage (tedding and silage) for the times when pasture is scarce, and tend still less to resort to the concentrated rations that are used in other countries for intensive animal fattening. Moreover, beef cattle do not have either good or sufficient food during the growing period when fodder is transformed into muscle tissue instead of into fat as in the case of adult animals. Other deplorable customs are those of reducing the milk supply for suckling calves and of giving the poorest pastures to growing cattle, which explains the difficulty of obtaining good quality meat from these animals and the low yields they give at the time of sale or slaughter. In fact, if it were possible to achieve co-ordinated action by the producers and the livestock development bodies to avert fodder shortages and provide cattle with good and sufficient food, the region's meat-producing capacity could be doubled on the basis of the same stock-farming area as at present.

There are indications that the Governments and the producers themselves are becoming increasingly convinced that the only way to raise productivity is to remodel the structure of livestock exploitation in all its aspects. At the same time the idea of improving the marketing system is gaining ground, and increasing emphasis is being laid on the planning of livestock development to which due importance is being attached in over-all economic development plans. Although these are slow and long-term tasks, several countries could undoubtedly obtain good results from such changes before the sixties are over.

4. FORESTRY PRODUCTION

Although Latin America possesses a quarter of the world's forestry reserves, its total contribution to the increase in world production in this sector has been modest in recent years. Difficulties of various kinds, such as the low concentration of commercial species, the lack of good communications, the inaccessibility of many forests, and their indiscriminate destruction as a result of misguided land settlement practices have all prevented forest exploitation from developing more rapidly.

However, specific measures are being taken in several countries to increase the volume of forestry production. It has been estimated that about 50,000 hectares of new forest are being planted annually in Latin America, thus enabling greater quantities of standard roundwood to be extracted.

The increasing deficit of timber in other areas, especially in Europe, and the consequent opening up of fresh markets, are providing a strong stimulus to forestry production in Latin America. However, they have had more of an effect on industrial than on primary forestry production. Whereas the total volume of roundwood removed increased from 212 million m^3 in 1960 to only 215 million m^3 in 1963, that is to say, at an annual rate of less than 1 per cent, production for industrial use expanded at a rate of approximately 2.5 per cent *per annum* (see table 46). The latter is still less than that of population growth, and barely a fifth of the total timber amount removed is used by industry, which leaves a vast field open for subsequent improvements, although some progress has undoubtedly been made, since the proportion of felled timber devoted to industrial use ten years ago was scarcely 10 per cent.

Production of sawnwood, on the other hand, has increased rather more rapidly in recent years, at an annual rate of 3.5 per cent, and in 1963 passed for the first time the figure of 12 million m^3. It is estimated that there are about 20,000 sawmills in Latin America with a total installed capacity of 40 million m^3, from which it is clear that the present rate of utilization is low. However, most of these sawmills are poorly equipped, and this leads to a great deal of wastage and to poor quality in the finished product.

The output of sleepers increased during the period in question by 5 per cent annually, and that of plywood achieved a spectacular increment of 10 per cent in 1961, becoming stabilized at 315,000 m^3. Production of fibreboard, on the other hand, increased to a lesser extent and at present totals approximately 105,000 tons per year. However, substantial increases may be expected in the next few years, since several countries, among them Uruguay and Venezuela, have installed new sawmills, and in others, such as Brazil, a considerable expansion of the existing mills is contemplated.

The greatest relative increase in recent years has been the pulp and paper sector. Between 1960 and 1962, p production expanded by 200,000 tons, i.e., 27 per t, and paper production by 300,000 tons, or 20 per t. This sizable increase permitted the area to reduce deficit in these products, since consumption rose by y 16 and 11 per cent respectively. Thus, the share of ports in total consumption shrank from 36 per cent 1958–59 to 31 per cent in 1962. Prospects of future reases in production are highly encouraging, in view the region's enormous natural resources, recent tech- logical advances in this field, and the great possibi- es for import substitution.

Although much remains to be done to develop Latin nerica's vast forest resources to the full, there has en manifest progress in several countries of the region ring the last three years, and important steps have en taken for the future utilization of the existing est potential. Special attention has been paid to the estry sector in the development plans of Colombia, uador and Uruguay; a Forest Development Institute s been created in Chile; forestry services in several ntries, such as Brazil and Peru, have been reorgan- d; new laws have been passed in Brazil, Honduras, exico, Nicaragua and Peru with a view to putting into ctice a more dynamic forestry policy; and there has en a notable improvement in the advanced forestry ining services, new faculties having been established several countries, such as Brazil and Peru.

At the same time, progress has been made in studying forest potential. In Mexico the first national forest entory was made, and in Ecuador, Guatemala, Hon- ras and Venezuela pre-investment studies have been ried out in specific areas. Steps have also been taken in several countries to incorporate the forestry sector into settlement and land reform plans. This is extremely important, since the damage done through the indiscriminate forest clearance as a result of the misguided practices followed in bringing virgin land under the plough often wipe out the benefits of reforestation.

Table 46. Latin America: Removal of industrial roundwood and processed wood production

Commodity	*Unit*	*1960*	*1961*	*1962*
		A. *Industrial roundwood*		
Sawlogs	Millions of m³	25.0	28.4	29.1
Pulpwood and pitprops	Millions of m³	3.3	3.0	3.5
Other wood for industrial use	Millions of m³	1.3	2.6	2.7
Total		29.6	34.1	35.3
		B. *Processed wood*		
Sawnwood	Thousands of m³	11,075	11,320	11,830
Railway sleepers	Thousands of m³	1,000	1,070	1,100
Plywood	Thousands of m³	280	313	315
Particle board	Thousands of tons	22	31	31
Fibreboard	Thousands of tons	98	105	105
Pulp	Thousands of tons	804	935	1,022
Paper and paperboard	Thousands of tons	1,552	1,776	1,863

Source: FAO, *Yearbook of Forest Products Statistics.*

5. Fisheries

The extraordinary expansion of fisheries production that has been taking place for several years in the countries lying on the Pacific coast of South America, especially Peru and Chile, acquired fresh momentum after 1959. In Peru the total catch rose from 2.1 million tons in 1959 to the record figure of 6.8 million in 1962, as a result of which Peru became the world's second largest producer, following hard upon Japan. Although on a more modest scale, Chile too recorded considerable increases during this period, the catch rising from 270,000 tons in 1959 to nearly 640,000 tons in 1962. The main cause of the boom was the vigorous development of fishmeal production under the stimulus of sustained world demand for this commodity.

The expansion that occurred in Chile and Peru, combined with the advances made in several other countries, such as Brazil, Colombia, Cuba, Ecuador and Mexico, caused Latin America's proportion of world fisheries production to increase from 2 per cent in the quinquennium 1948–52 to over 18 per cent in 1962 (see table 47).

The remarkable progress made by the fisheries industry in some Latin American countries has been favoured by the development policies adopted by the respective Governments. In Chile, imports of equipment and materials for fisheries are no longer liable to payment of customs duty, and considerable tax concessions have been made to industries operating in this sector. Also contemplated is a special tax concession for fishmeal plants that reinvest a stipulated proportion of their profits, and extensive technical assistance and credit facilities have been given to producers and fishery co-operatives. Brazil has taken a number of measures to improve distribution and marketing, and to encourage the installation of new processing plants. In Cuba, an ambitious programme for fishery development, which includes the construction of a new fishing port, has been launched. In Peru, on the other hand, the Government has been obliged to take certain steps to prevent the exceptional development of this industry from having a serious effect on the country's fisheries resources, including stricter control over the granting of licences for the establishment of new processing plants or the expansion of those already in existence.

Table 47. World fish and shellfish catch

(*Millions of tons, live weight*)

	1948–52	*1959*	*1960*	*1961*	*1962*[a]
World . . .	21.2	35.7	38.0	41.2	44.5
Latin America .	0.5	3.2	4.7	6.5	8.0
Peru . . .	0.08	2.1	3.5	5.2	6.8
Chile . . .	0.09	0.3	0.3	0.4	0.6

SOURCE: FAO, *The State of Food and Agriculture*, op. cit.
[a] Provisional figures.

The progress of the fisheries industry has not only greatly increased fishmeal production but has also led to a remarkable increase in the supply of fish and shellfish for domestic consumption. The decline in meat production has thus been offset to a certain extent. However, in many countries, *per capita* consumption of fisheries products is still very low. In Argentina, Brazil and Peru, it is less than 3 kg per year, and in Venezuela less than 1 kg, but in Chile, thanks to the publicity campaign that has been carried on unremittingly for more than ten years, it has risen to approximately 13 kg.

In view of the enormous reserves possessed by the Latin American countries on both the Pacific and Atlantic coasts, and the prospects for domestic and external consumption, there is every likelihood that the fisheries industry in Latin America will continue to develop with extraordinary rapidity.

Chapter IV

MANUFACTURING INDUSTRY

A. GENERAL TRENDS IN INDUSTRIAL PRODUCTION AND DETERMINING FACTORS

The recent evolution of the industrialization process Latin America as a whole has been characterized by a umber of conflicting factors. Production trends are mong the most unfavourable, since the rate of growth as weakened to such a degree that the over-all rate of crease in the volume of production has reached its west level for the whole of the post-war period. Hower, efforts to expand and diversify production capacity ave not slackened off to the same extent, while imporant plans mainly relating to the exportation of manufacred goods are taking shape or are well under way and eat progress has been made in modernizing traditional dustries and raising their productivity.

In the light of all these considerations, the decline in e growth rate of production seems to be essentially ircumstantial and does not necessarily preclude the ossibility of eventually regaining, or even exceeding, its revious rate of expansion. As, moreover, the trends in uestion vary from one country to another, it is advisable or a fairly searching examination to be made of each of e factors referred to above.

Table 48. Latin America: Evolution of the over-all gross domestic product and of manufacturing industry by countries[a]
(*Rate of increase*)

Country	*1950–55*	*1955–60*	*1960*	*1961*[b]	*1962*[b]	*1963*[b]	*Industrial product as percentage of the gross product*[c]	*Each country's share as percentage of Latin America's total industrial product*[d]
I. *Gross domestic product*								
Latin America	*5.0*	*4.7*	*5.8*	*5.3*	*3.5*	*2.0*	—	—
II. *Gross industrial product*								
Latin America	*6.1*	*6.6*	*7.0*	*7.4*	*2.8*	*1.4*	*23.4*	*100*
Argentina	3.8	3.6	5.8	7.5	−5.3	−5.5	31.5	28
Brazil	8.1	10.3	10.6	11.1	6.8	1.9	29.0	36
Chile	4.3	2.2	−2.1	−2.5	5.7	2.5	18.2	6
Colombia	6.9	6.1	6.1	5.9	6.9		17.4	3
Ecuador	4.0	5.5	7.7	0.9	6.6	7.4	17.3	1
Mexico	6.6	8.1	8.3	3.6	6.4	8.2	22.5	15
Peru	7.8	6.1	15.0	10.0	8.6	5.6	18.9	2
Uruguay	6.9	5.3	0.3	−1.7	−4.1	−4.5	...	2
Venezuela	11.7	7.7	−3.8	3.8	8.0	8.7	12.1	5
Others	5.4	2.4	5.0	...	...	...	...	2

SOURCE: ECLA, Economic Development Division.

[a] Costa Rica, Cuba, the Dominican Republic and Guatemala are excluded for lack of information. The term "Latin America" therefore refers to sixteen countries only, which represent between 90 and 95 per cent of the region's gross domestic product. In every case the gross product is taken at factor cost.

[b] Provisional figures.

[c] Calculated on the basis of data for 1963.

[d] The percentage share of each country was calculated on the basis of the average for the last five years.

1. PRODUCTION GROWTH

During the period 1960–63, manufacturing industry was unable to escape the consequences of the general decline in the rate of development that was experienced by the Latin American economy as a whole. This fact has been analysed thoroughly in earlier chapters of this survey, so that, for the purpose of studying developments in the industrial sector, it will suffice to recall the most significant points, namely, the decrease in the annual average growth rate of *per capita* income to only 0.7 per cent in 1960–63, and its decline in absolute terms in the last year of that period; the strong influence on these trends of the drop in the level of *per capita* income in Argentina and in Brazil's rate of development; the fact that investment increased more slowly than the over-all gross product; and the tendency of average *per capita* consumption to stagnate, coupled with signs of an increased concentration of income, or at least of the lack of any real progress in its redistribution.

In these circumstances, the growth rate of manufacturing industry, which in 1950–61 had been relatively satisfactory and had gained considerably upon that of the over-all product, especially after 1955, underwent a sharp decline; in 1962 the increment was only 2.8 per cent and in 1963 barely 1.4 per cent as compared with 7.4 per cent in 1961. This halted the expansion in the industrial sector's share of the total gross product, which rose from 20 per cent in 1950 to 21.3 per cent in 1955 and 23.3 per cent in 1960, thereafter remaining virtually unchanged until 1963 (23.4 per cent).

A decisive influence on those over-all trends was, of course, exercised by Argentina and Brazil, which have nearly two thirds of all Latin America's industries (see table 48). Argentina's industrial sector declined respectively by 5.3 and 5.5 per cent in 1962 and 1963 in relation to its levels in the immediately preceding years, while the volume of production in Brazil continued to expand, but at a much slower pace than the comparatively high rates registered in earlier years.

The Depression seems to have affected practically all branches of industry in Argentina, and has emphasized the existence of large margins of idle capacity, which are estimated to be 75 per cent in the machine-tools industry, 50 to 60 per cent for agricultural, road making and shipbuilding equipment, and prime movers, and 40 per cent in the new motor vehicle and the tractor industry. Accordingly, the decline in production was linked, above all, to a marked reduction in real demand, which, in its turn, was brought about by general factors whose favourable evolution in more recent months is a sign that the most critical phase of the Depression is over.

In Brazil, too, industrial activity in 1963 suffered the impact of a number of adverse factors and events which reacted on some or all sectors of economic activity, particularly manufacturing industry. The factors in question included the acceleration of the inflationary process, spurred on by a growing fiscal deficit, which proved impossible to contain through stabilization measures and credit controls that were not always suitable for the ends pursued. Similarly, labour disputes in 1963 slowed down the tempo of work in manufacturing enterprises. Mention should also be made of the obstacles with which the external sector had to contend, and the consequent difficulty of keeping up the level of imports. There were, in addition, other factors exerting a negative effect, especially on industry. These include the shortage of electric energy in Brazil's two most important industrial centres—the States of São Paulo and Guanabara. The picture is completed by the floods and fires in the States of Rio Grande do Sul and Paraná, which affected the supply of certain raw materials.

In contrast to these two countries, Mexico, whose industry represents some 15 per cent of the Latin American total, recovered the rapid rate of industrialization it had achieved in former years, after the deterioration noted in 1961 (see again table 48). Similar increases and recoveries in the growth rate of the industrial product were observed in Chile, Ecuador and Venezuela, while setbacks occurred in Peru (even though it maintained positive rates of increase) and Uruguay (where for three consecutive years the industrial product underwent a contraction in absolute terms). Lastly, in Central America, the growth rate of manufacturing production moved up steadily from an annual average of 3.1 per cent in 1957–60 to 6.1 per cent in 1961, 10.2 per cent in 1962 and 10.4 per cent in 1963.

Between 1960 and 1963, these trends caused industry's share of the gross product to diminish from 32.1 to 31.5 per cent in Argentina, to remain practically at a standstill in Chile (at about 18.7 per cent) and to increase in Central America, Brazil, Mexico, Peru, Venezuela and other countries.

2. THE STRUCTURE OF INDUSTRIAL PRODUCTION

It was only to be expected that the over-all trend of manufacturing production would not be the same for all branches of industry. If industries are classified as traditional or dynamic it will be seen that, although the latter expanded more rapidly during the period 1960–63 as a whole, they determined the particularly adverse behaviour of the industrial product in the last year of the period (see table 49).

The slower growth of the traditional industries—foods, beverages, tobacco, textiles and hides, etc.—is the natural result of the small increase in *per capita* consumption and the persistence of an income distribution pattern that is generally highly regressive, combined with the advanced stage of import substitution reached by many countries of the region. At the same time, however, the relatively pressing nature of the needs these industries satisfy gives them greater stability in times of economic recession, and thereby equips them (as in recent years) to cushion the impact of sudden changes in the industrial sector as a whole. The relevant data indicate that during the prosperous years from 1955–60 to 1961 the growth rate of the traditional industries was moderately sustained—albeit considerably slower than that of the dynamic industries—and that in the last few stagnant years they continued to expand, though again less than the dynamic industries. By contrast, the latter showed a marked improvement between their average in 1955–60 and in 1961; in 1955–60 the average was nearly 7.6 per cent annually, but fell to 4.8 per cent in 1962, and to as little as 1.5 per cent in 1963. As regards individual branches in this group, only the chemical industry and, to a lesser extent, the basic metal trades depart from the general pattern of stagnation or decline. In the case of the chemical industry, the favourable trend can be ascribed to petroleum refining, whose level of activity was far less affected by the drastic changes taking place in the rest of the sector. Complete data on the basic metal trades are lacking for 1963, but it is not unlikely that their relatively favourable evolution derived largely from the fact that a good part of their output is destined for export and is therefore basically unaffected by factors connected with the internal economic situation.

The fact that the level of activity in the dynamic industries as a whole fell sharply in 1963 poses a serious problem for the economy in general that transcends the bounds of the industrial sector itself and involves the whole economic development of the region. The so-called dynamic industries—which are usually characterized by broad economies of scale—constitute one of the essential bases of two important aspects of development. The first is the partial replacement of the external sector as a dynamic element in the domestic economy since, particularly for some of the larger countries of the region, its importance in that capacity has been declining during the last few years. The second relates to the anges in the structure of production that are sought every development process and have a significant aring on the stability of growth, investment possibi- es, employment—natural growth of the labour force, der-employment and structural changes in employ- ent—and the growth and distribution of domestic come. These industries also have much to do with the tablishment of regional integration, since the surplus demand over production in the region as a whole, upled with the fact that many countries lack some of e branches of industry that fall into this category, give e dynamic industries substantial possibilities of initiat- g and promoting integration.

Table 49. Latin America: Quantum of production[a]
(Index: 1958=100)

ISIC Group	*Branch of industry*	*1955–60*	*1961*	*1962*	*1963*[b]
20, 26 and 29 . .	*Traditional industries*[c]	*98.6*	*114*	*115*	*121*
20, 22	Foods and tobacco	96.3	111	113	...
23	Textiles	102.0	116	112	110
24	Made-up textile goods	...	...	...	...
25, 26	Furniture and wood manufacturers	...	...	...	...
29	Leather	97.5	135	142	...
27, 28 and 30–39 .	*Dynamic industries*[c]	*96.2*	*124*	*130*	*128*
27	Pulp and paper	95.2	122	127	120
28	Printing and publishing	97.7	122	128	...
31–32	Chemicals and petroleum refineries	96.7	128	138	141
33	Non-metallic mineral products	100.3	119	124	119
34	Basic metal industries	97.8	117	124	126
35–38	Metal products	91.3	129	131	120

SOURCE: United Nations, *Monthly Bulletin of Statistics*, February 1964.

[a] The figures in this table refer to the quantum of industrial production and therefore differ conceptually from those for value added which are given at the beginning of the section.

[b] First half of 1963.

[c] The indexes for these groups are estimates.

3. THE SHARE OF DOMESTIC PRODUCTION IN THE TOTAL SUPPLY OF MANUFACTURED GOODS

Although the import substitution process has reached very advanced stage in a number of countries and indus- al production lines, there is no doubt that it continues have a dynamic influence on the development of the anufacturing sector. Adverse trends recorded in recent ars by the external sector, and the resulting deteriora- on in the region's balance-of-payments position are ctors which, while enhancing its stimulating effect, tend the same time to curb it, inasmuch as substitution tivities require a certain proportion of imported inputs.

The average import coefficient for Latin America as whole fell from 11.0 to 9.6 per cent between 1960 and 63. This could be taken to mean that import substitu- on continued on a fairly intensive scale. Nevertheless, a more accurate interpretation of the situation, at ast two additional factors should be taken into account: st, and this is particularly important for assessing the haviour pattern of the industrial sector, the imports in question include not only manufactures, but also other types of goods and services; secondly, the relative reduction in imports was not necessarily the product of substitution activities, but also derived from a general contraction in imports owing to balance-of-payments problems.

In Argentina, import substitution was intensive in the period immediately preceding the Depression, but subsequently slowed down. In Brazil, its rate also declined in recent years, as a result of balance-of-payments difficulties. On the other hand, the steady rate of development observed in Mexico has persisted for many years, while in Central America import substitution has acquired a fresh impetus through the perfecting of integration instruments.

It would be as well to supplement these general considerations with a few comments on the progress of import substitution in specific branches of industry, without prejudice to a fuller account of their evolution, which is given in a later part of this Survey.

Naturally enough, no very noticeable changes are to be expected in the textile industry in view of the high level of substitution it has already achieved in the region. It is estimated that at least 90 per cent of the 900,000 tons making up total textile consumption is of domestic origin. However, great strides have been made in certain countries where the proportion of domestic supply is still relatively small, as also in certain more newly developed lines of textile production; Venezuela is an example of the first case, and the manufacture of synthetic fibres—which has spread to many Latin American countries—of the second.

In the pulp and paper industry the situation varied somewhat according to the item in question: newsprint, pulp or other paper and paperboard. Some important programmes were carried out in connexion with newsprint, but failed to make a noticeable improvement in the low production–import ratio, since the share of imports in total consumption continued to fluctuate between 75 and 80 per cent. Argentina, Brazil, Chile and Mexico enjoyed substantial increases in pulp production, which enabled the region to cover a much larger share of over-all consumption, and, in the case of paper and paperboard other than newsprint, import substitution also attained fairly high coefficients.

As regards basic chemicals, in 1962 the output of caustic soda in the seven principal producing countries exceeded the volume of Latin America's total imports for the first time. At the same time imports of sodium carbonate were successfully prevented from increasing any further thanks to a sharp increase in domestic production; in 1959 the total output of Brazil, Chile, Colombia and Mexico had only just covered 25 per cent of total apparent consumption, whereas in 1962 it supplied nearly 40 per cent. The situation of the other chemicals was probably very different, to judge by the leap in total imports from 845 million dollars in 1958–59 to 1,049 million in 1962.

The steel industry's contribution to the import substitution process continued and was even intensified in the past few years, since a sizable increase took place in the domestic manufacture of finished and semi-finished rolled products (from 4.712 million tons in 1960 to 6.486 million in 1962[1]) and a decrease in the absolute volume of such imports (from 2.747 million tons to 1.956 million tons over the same period).

Lastly, in several countries of the region, including Chile, Colombia, Ecuador, Peru and Venezuela, large strides were made in the import substitution of durable consumer goods—mainly electrical appliances for household use—and other products of the metal-transforming industries. But perhaps the most significant fact in this branch of manufacturing activity is the expansion of the motor-vehicle industry and its extension to new countries. Production in five countries of the region—Argentina, Brazil, Chile, Mexico and Venezuela—reached its peak in 1962 with over 400,000 vehicles, which dwindled in 1963 to about 385,000. In Argentina, approximately 50 per cent of the total number of motor vehicles is now manufactured locally; in Brazil the industry has reached the stage where over 96 per cent (in weight) of the parts for the motor vehicles produced are of domestic manufacture; in Mexico, imports of passenger cars have been considerably reduced, the number of makes assembled in the country has diminished and the proportion of locally produced parts has steadily increased; in Colombia, assembling activities were initiated in 1962 and several new projects are making headway, and similar progress is noted in Chile, Peru and Venezuela. Agreements aimed at an increasing measure of regional complementarity in this industry have recently been concluded in certain cases, e.g., between Argentina, Brazil, Chile and Uruguay.

4. EXPORTS OF MANUFACTURED GOODS

While import substitution has constituted one of the fundamental objectives of the traditional industrialization process in Latin America, efforts to promote exports of manufactured goods have, in general, been lacking in vigour. Consequently one of the salient factors in the recent evolution of industry is the crystallization or expansion of projects for the exportation of manufactures, which, although still of modest scope in absolute terms, indicate that certain changes are taking place in established patterns. Perhaps the clearest example of this is furnished by Mexican industry, which has succeeded in developing an appreciable flow of manufactured goods both to other Latin American countries and to markets outside the area. Regional agreements have also encouraged exports of manufactures from Argentina and Brazil, and are gradually becoming a key factor in the acceleration of Central America's industrial growth.

As regards the type of products constituting the export lines, they are also being increasingly diversified. In textiles, for example, Colombia's exports of artificial fibres and cotton goods amounted in 1962 to about 2 million dollars. Mexico's total textile exports attained an annual level of some 33 million dollars, and included not only henequen manufactures—which used to constitute the bulk of its textile trade—but also cotton textiles and artificial fibres.

As regards the pulp and paper industry, Chile is the only major exporter in the region. Its pulp export potential will soon be much greater as the result of a project to treble the existing plant's production capacity and the completion of a new plant.

With respect to chemicals, exports of the main items amounted to nearly 150 million dollars in 1962. Although this figure includes certain traditional Latin American exports, some temporary surpluses made it possible to export new products such as synthetic rubber (from Brazil), and fertilizer compounds and ammonium nitrate (from Central America and Mexico). It is interesting to note that intra-regional trade still represents a rather small proportion of the total volume of these exports, i.e., about 19 per cent. Mexico, which has taken the lead in Latin America as an exporter of chemicals, continued to enjoy a considerable share of that trade with countries outside the region, Colombia and Ecuador being the only countries to sell more than half their chemical products in Latin America itself, although the amounts involved are still small.

Lastly, the regional agreements in force are also facilitating intra-regional trade in the products of the metal-transforming industries, including motor vehicles which undoubtedly offer some of the best prospects for future trade expansion.

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[1] Production figures for Argentina, Brazil, Chile, Colombia and Mexico.

. RECENT DEVELOPMENTS IN SOME OF THE MAIN SECTORS OF MANUFACTURING INDUSTRY

The foregoing review of certain general factors ob- rved in Latin American industry as a whole should be ipplemented by a more detailed analysis of the principal evelopments in specific sectors. Besides amplifying and ibstantiating the general observations, an analysis of is kind can provide additional data on the efforts that ive been made to modernize certain industries, and on ew projects for expansion and diversification that may ive a considerable impact on the intensity and pattern industrial development in the next few years.

1. The textile industry

The production capacity of Latin America's textile dustry has been comparatively stable in recent years, nd additions (the installation of new machinery and quipment) have been largely offset by the removal of bsolete machinery. According to estimates for the outh American countries, the number of cotton spindles istalled did not vary greatly between 1961 and 1962, ut their level of activity in 1962 was far below that of revious years. However, the spindles in use were run or more hours in 1962, so that the total number of oindle-hours worked turned out to be practically the ame.

Table 50. South America: Installed capacity and operation of machinery in the textile industry

	Unit	*1960*	*1961*	*1962*
Spindles installed as of 31 December	Thousands	6,194	6,295	6,129
Spindles in operation . . .	Thousands	5,765	5,867	5,379
Spindle-hours worked . . .	Hours	5,250	5,035	5,613
Looms installed as of 31 December	Thousands	—	155.9	156.9
Looms in operation . . .	Thousands	—	143.6	146.9
Loom-hours worked . . .	Hours	4,889	4,916	4,309

Source: International Federation of Cotton and Allied Textile Industries.

Table 51. World distribution of production capacity in the textile industry
(*Percentage of total*)

Region	*1958*	*1959*	*1960*	*1961*	*1962*
		A. *Cotton spindles in operation*			
Africa	1.14	1.25	1.36	15.4	1.72
North America . .	18.24	18.14	18.26	18.16	18.85
South America . .	4.52	4.70	4.84	4.97	4.61
Asia and Oceania . .	27.62	30.39	32.02	32.91	32.81*
Europe	48.48	45.52	43.52	42.42	42.01
		B. *Looms in operation*			
Africa	1.25	1.32	1.40	1.43	1.49
North America . .	15.79	15.24	14.98	14.65	13.53
South America . .	6.75	6.88	5.95	5.83	5.73
Asia and Oceania . .	28.49	31.56	33.29	35.62	38.78
Europe	47.72	45.00	44.38	42.47	40.47

Source: International Federation of Cotton and Allied Textile Industries.

Installed weaving capacity remained virtually unchanged, but the proportion of looms in operation was slightly larger in 1962 than in 1961. In contrast to the trend observed in the spinning mills, the increased activity of weaving equipment was accompanied by a reduction in the hours worked, as can be seen from the figures in table 50, the net effect being a drop of 10 per cent in the total number of loom-hours worked.

This disparity of evolution between spinning and plain weaving is perhaps attributable to the trend noted in Latin America and in other parts of the world towards a very fast expansion in respect of knitted and crocheted fabrics, which absorb increasingly large proportions of yarn from the spinning mills. In this way the level of activity in the spinning mills is being maintained and could be raised, while that of plain weaving is being adversely affected. Moreover, the shortage of spinning in relation to weaving capacity also has an effect on spinning operations (see table 51 from which the ratio of spindles to looms in different parts of the world may be estimated).

The South American textile industry plays a minor role in world textile activities, since in 1962 it accounted for barely 5 per cent of the world spinning total, and in weaving its share did not exceed 6 per cent.[2] For both spinning and weaving the proportions were less than before, and South America is the only developing region whose share, far from increasing, suffered a relative setback.

The stagnation in production capacity is, to some extent, a reflection of the evolution of the Latin American textile industry, which manages to supply nearly all the region's consumption requirements in respect of spun and woven goods. Hence, there is not much scope for import substitution—except in a few countries like Venezuela, or in synthetic and other specific fibres—and production keeps pace with the growth of demand, which is very sluggish. Latin America's total textile consumption is estimated to be about 900,000 tons, 90 per cent of which is produced by the various countries of the region. This represents a *per capita* consumption of nearly 4.4 kg annually, which has remained much the same in recent years with a slight downward tendency for the region as a whole because of the repercussions of the sharp drop in Argentina's output, and the gradual weakening of the growth rate in Brazil to the point when in 1963 textile production was less than in the preceding year.

The salient feature of the textile industry during the period under review was perhaps the intensification of the trend—initiated some years earlier—towards consumption of synthetic fabrics. The increase in this branch of consumption is one of the few positive elements in the industry, which in general is not distinguished by its dynamism. The trend is important, not because of the volume or absolute value of consumption—which are still low in relation to the total—but because it contrasts with the extremely sluggish growth of textile consumption as a whole, and involves fibres whose prices are higher than those of natural and artificial fibres. The launching of synthetic fibres on the market by manufacturers of finished products—plain woven fabrics, knitted and crocheted textile fabrics and made-up goods—and their popularity among consumers indicate that the textile market, far from being saturated, responds positively to the stimulus of supply. Its reaction is also partly due to the fact that the producers of these fibres—which originated in the European and United States chemical industries—carry on and support an intensive publicity campaign on the fibre properties. This suggests that, irrespective of the particular merits of synthetic fibres, the market for other fibres might also be induced to expand by the same kind of stimulus. In fact, results are already being obtained in the case of mixtures of synthetic fibres with wool or cotton, thereby enabling the last two to recover part of the market they had lost with the advent of man-made fibres.

Table 52 shows the total supply of artificial and synthetic fibres, which represents about 15 per cent of total fibre consumption. The former, which have been in use for many years, have remained at the same level or have declined in over-all terms. By contrast, both production and consumption of synthetic or non-cellulose fibres have made considerable progress. As mentioned before, synthetic fibres still constitute no more than a small proportion of the total volume of fibre consumption—slightly over 2 per cent—but their high unit value greatly

Table 52. Latin America: Production and supply of man-made fibres and filament
(*Millions of lb.*)

Country	*Year*	*Filament and fibres*				*Total*	
		Rayon and acetate		*Non-cellulosic*			
		Production	*Supply*	*Production*	*Supply*	*Production*	*Supply*
Argentina	1961	37.0	42.5	4.5	10.3	41.5	52.8
	1962	26.1	31.8	6.2	8.7	32.3	40.5
Brazil	1961	91.3	91.3	12.0	12.0	103.3	103.3
	1962	85.3	85.3	18.0	18.0	103.3	103.3
Chile	1961	6.9	7.7	9.8	1.5	7.7	7.2
	1962	7.2	8.2	1.0	1.9	8.2	10.1
Colombia	1961	17.6	17.5	1.1	2.5	18.7	20.0
	1962	19.7	18.7	1.9	3.9	21.6	22.6
Cuba	1961	9.0	9.0	0	0.2	9.0	9.2
	1962	7.0	8.0	0	1.0	7.0	9.0
Mexico	1961	49.4	47.6	2.9	10.3	52.0	57.9
	1962	49,2	48.5	6.4	17.0	58.6	65.5
Peru	1961	2.5	10.8	0.1	3.0	2.6	13.8
	1962	2.6	9.9	0.3	4.5	2.9	14.4
Uruguay	1961	1.4	6.5	0.7	2.6	2.1	9.1
	1962	1.0	4.5	0.6	2.0	1.6	6.5
Venezuela	1961	6.9	13.8	0.6	4.6	7.5	18.4
	1962	7.2	15.5	0.7	6.8	7.9	22.3
TOTAL	1961	222.0	246.7	31.7	47.0	244.4	293.7
	1962	205.3	230.4	35.1	63.8	243.4	294.2

SOURCES: Textile Economics Bureau, Inc., *Textile Organon*, New York, various issues; Mexico, Nacional Financiera, S.A.

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[2] These figures relate only to South America and therefore exclude Mexico, which is included in North America.

creases their share of the value of production or con-mption. Although artificial fibres are mainly of mestic origin, 40 to 50 per cent of the synthetic fibres e imported.

Provisional data for 1963 indicate that no radical ange occurred in the position as observed in 1961 and 62, and that production of synthetic fibres continued expand. Argentina, for example, embarked on the anufacture of discontinuous polyester fibre, and is pected to turn out 4 million lb annually. The plant in estion was also planning to add the necessary produc-on capacity at the end of 1963 to manufacture annually 6 million lb of polypropylene fibre of different kinds. ate in 1963 it was also announced that Colombia's rgest plant had formed a consortium together with e of the major textile firms in the United States with view to producing polyester fibre in Medellín. Vene-ela reported that projects were under way to expand e production capacity of the Sudalón plant at Maracay, order to increase its production of nylon-6. This terprise will produce some 2 million lb of nylon nually, thereby supplying 80 per cent of Venezuela's eds in this respect. The expansion will cost about 5 million dollars, the machinery and equipment being ported from Germany and the United States.

The data relating to textile production in individual untries and Latin America as a whole are very in-mplete, and the indexes presented are often estimates sed on piecemeal information (see table 53). They , however, give a glimpse of a fairly pronounced pro-ction trend in the last few years, which began with a oderate rate of growth between 1959 and 1961, and en declined in 1962 and 1963. The deterioration in the gion as a whole was due to the slump in Argentina's tput, which assumed particularly serious proportions 1962 and persisted into 1963, and to the fact that azil's production expanded much less in 1962 than in evious years, and declined in 1963. Mexico's produc-on was also inclined to stagnate between 1960 and 62, but apparently began to progress again in 1963. contrast, production indexes for Chile, Colombia, Peru and Venezuela reached new peaks in 1963, but the improvement was insufficient to counterbalance the negative trends in the three most densely populated countries of the region.

Table 53. Latin America: Estimated textile production
(*Index: 1958=100*)

Country	*1959*	*1960*	*1961*	*1962*	*1963*
Argentina . .	79.2	84.6	90.2	64.4	53.3
Bolivia . . .	102.6	108.8	132.5	135.5	138.6
Brazil . . .	104.0	114.0	121.2	125.8	124.2
Chile . . .	109.5	98.8	103.2	108.7	125.7
Colombia . .	106.6	115.0	127.7	130.8	134.5
Ecuador . . .	102.5	109.1	124.3	133.1	142.5
Mexico . . .	105.3	110.3	109.2	110.7	114.0
Peru . . .	110.0	124.0	126.0	134.0	140.0
Uruguay . . .	106.0	82.0	85.0	76.0	76.9
Venezuela . .	123.0	139.0	146.0	176.0	188.0
TOTAL	99.4	105.6	111.3	108.3	107.0

SOURCE: ECLA, on the basis of official data and estimates.

The contraction in Argentina's textile production affected both the cotton and wool sectors, although the latter bore the brunt of the impact. The figures in table 54, based on an ECLA survey which does not cover the whole range of production, show the production trends in the principal sectors, that is, cotton and wool yarn and fabrics.

Table 54. Argentina: Volume of textile production
(*Tons*)

Year	*Yarn*		*Textile fabrics*	
	Cotton	*Wool*	*Cotton*	*Wool*
1958 . .	99,255	21,643	71,921	14,420
1959 . .	86,031	18.993	63,466	12,275
1960 . .	95,413	22,411	74,386	13,386
1961 . .	95,271	24,763	72,874	15,211
1962 . .	77,160	16,715	58,372	97,765
1963 . .	75,454	13,178	57,060	8,218

A similar state of affairs occurred in Brazil, where the indexes of São Paulo's production, which represents 60 per cent of the country's total, bear witness to its stagnation in 1963, especially as regards cotton and wool.[3] On the other hand, man-made fibres followed a rather more positive trend, to the point where it became necessary to increase the supplies of raw materials on which this sector depends.

Chile's textile output rose in 1962 and 1963, as a result of the upswing in production of yarn and plain fabrics, while knitted and crocheted fabrics recovered the swift rate of growth they had been enjoying some years before. The following figures show the respective movements of the two partial indexes and of the index for the textile industry as a whole.

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[3] Conjuntura Económica, *Retrospecto 1963*.

	1958	*1959*	*1960*	*1961*	*1962*	*1963*
Yarn, textile fabrics and made-up articles	100.0	109.5	98.8	103.2	198.7	125.7
Knitted or crocheted fabrics	100.0	137.3	124.6	149.9	166.0	188.8
TOTAL TEXTILES	*100.0*	*115.1*	*102.9*	*111.1*	*118.7*	*137.0*

Colombia's textile industry was also characterized in 1963 by vigorous growth and a high level of efficiency, which enabled it to continue expanding its production and to gain access to foreign markets. As indicated by table 52, Colombia exported artificial fibre products, and in 1962 its exports, including cotton goods, totalled 4.5 million dollars. In the same year, the largest textile enterprise in Colombia received a loan of 2 million dollars from the International Finance Corporation, and a consortium of international banks was formed in 1959 to facilitate the execution of the programme for modernizing and expanding the industry. This programme, whose total cost is 13 million dollars, reflects the importance of the enterprise in question, which produces nearly half Colombia's entire output of cotton fabrics and controls several other textile concerns which form an integrated group. Colombia's production in 1962 consisted of 60,000 tons of yarn and 65,000 tons of textile fabrics,[4] divided as follows:

	Yarn (tons)	*Textile fabrics (tons)*
Cotton	53,160	50,135
Wool	4,093	3,769
Man-made fibres	3,361	11,060

Mexico's textile exports are the largest in the region, amounting to some 33 million dollars annually. The bulk of these exports consist of henequen thread, cables and rope, but a considerable proportion is composed of cotton fabrics, whose total dropped from 8 million dollars in 1961 to only 4 million in 1963. On the other hand, exports of henequen products remained at the same level in 1962 and increased slightly between then and 1963. Mexico also exports artificial fibre products to a value of over one million dollars annually.

The greatest relative development in recent years has been recorded by Venezuela's textile industry, as the result of an import substitution programme which represented a considerable expansion of production capacity and of output itself. It is estimated that the Venezuelan Development Corporation has invested a total of 25 million dollars for the purpose of modernizing and enlarging the textile industry and thereby supplying domestic needs. Other investments have also been made, such as that by one of the largest international manufacturers of sewing thread, which in 1963 was building a plant with an annual production capacity of 770,000 lb of cotton thread. This plant, which represents an investment of 16 million bolivars, would constitute a joint stock company operating with 50 per cent Venezuelan capital. A plant of 4,000 spindles, with a working capital of 2.5 million dollars and machinery that is in the main European, was to be installed in Caracas for the production of worsted yarn, and combed yarn mixed with Dacron, of fine and medium counts. The plant would purchase tops from Australia, Uruguay, New Zealand and other countries, and would manufacture some 350,000 kg of thread annually. It was expected to enter into operation at the end of 1963.

According to the United Nations textile expert who is acting as adviser to the Industrial Division of the Ministry of Development, about 12,000 spindles for worsted would cover a large proportion of Venezuela's growing demand for this item, and the new ratio for imports of textile fabrics and suitings to domestic production (1 : 5 metres) will do much to foster domestic manufacture. Another two spinning mills, with 4,000 spindles each, are under consideration.

The evolution of production capacity from 1958 onwards is shown by the following indexes:

	1958	*1962*	*1963*
Spindles	100	188	212
Looms	100	158	142

Production figures were equally satisfactory, the greatest headway being made in cotton yarn and fabrics. In 1963 production of cotton yarn more than doubled its 1958 figure and production of cotton fabrics more than trebled (see table 55). The remaining items also underwent an increase, except for pure woollen fabrics whose production diminished, owing to competition from mixtures (mainly synthetic). In terms of value, production rose by 9.1 per cent between 1962 and 1963 (from 712 to 777 million bolivars at 1960 levels). Textile imports dropped from 161 million bolivars in 1960 to 101 million in 1962 and to 93 million in 1963. Textile prices remained fairly stable, with a rise of only 3 per cent between 1959 and 1962. In 1963, by virtue of an agreement between Venezuela's Ministry of Industry and twenty-five textile producers, it was stipulated that in exchange for tariff protection for the textile industry, the prices and standards of quality obtaining for textiles in September 1963 would remain in force.

To sum up, it may be concluded that textile demand did not increase significantly and that in the principal countries of the region it either remained at a standstill or fell below its previous levels. It should be noted that these are also the countries where the textile industry was first established. The increments in production registered in other countries were in some cases attributable to import substitution, as in Venezuela, and in thers to the introduction of new products, principally f synthetic fibres. All in all, however, consumption, articularly of cotton and woollen goods, has not made atisfactory progress and has failed to keep pace with opulation growth. This lack of vigour in demand for xtile products has driven the industry to make greater fforts to enlarge the range and improve the quality of s goods, and to pay more attention to operating condi-ons with a view to rationalizing its cost structure. In razil, where only 20 per cent of the cotton spindles nd 31 per cent of the looms are up to date,[5] an extensive rogramme has been worked out for the replacement of quipment, in order to modernize the textile industry rom the technological standpoint in line with the condi-ions prevailing in Brazil. This five-year programme, vhose cost is estimated at about 200 million dollars, contemplates large-scale purchases of textile machinery rom Brazil's manufacturing industry, whose share in he programme would be nearly 66 per cent, and the mportation of the remaining 34 per cent. The inaugura-ion of this programme has been held up by adverse conomic conditions in Brazil, not only as regards the vailability of credit for financing the purchase of lomestic machinery, but also the difficulty of obtaining he foreign exchange needed to import equipment.

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[4] ECLA, *La industria textil en América Latina. IV. Colombia* (in course of preparation).

Table 55. Venezuela: Production of selected textile items

Product	*Unit*	*1960*	*1961*	*1962*	*1963*
Textile products					
Cotton yarn . . .	Tons	6,321	7,845	12,478	13,628
Cotton fabrics . . .	Thousands of metres	17,312	33,168	50,427	59,607*
Rayon fibre yarn (continuous)	Tons	2,266	2,831	3,342	2,869
Rayon fibre yarn (discontinuous)	Tons	489	396	1,102	1,982
Fabrics of artificial fibre					
Fabrics of artificial silk .	Thousands of metres	26,872	23,892	31,364	33,985
Fabrics of artificial silk mixed with cotton . . .	Thousands of metres	5,320	3,299	8,501	7 476
Wool fabrics					
Fabrics of pure wool, or mixtures containing less than 30 per cent wool . .	Thousands of metres	1,016	1,053	1,093	834
Mixtures containing more than 30 per cent wool .	Thousands of metres	799	294	814.3	2,745

Although the over-all programme has been delayed by he economic conditions prevailing in the last two years, ome manufacturers have gone ahead on their own. Thus, Cotonificio Leite Barbosa de Aracati, State of Ceara, is planning to import 2.2 million dollars' worth of textile machinery for its plant at Santa Cecilia. Several ão Paulo industrialists have formed a company to build n integrated textile plant in Natal, Rio Grande do Norte, which is one of the few places in Brazil where ong-staple cotton is grown. It is estimated that once his plant has been completed (at a cost of 2.5 million lollars) it will manufacture 1 million metres of cotton poplin a month.[6] The Gasparian industries of São Paulo, among others, plan to import machinery and equipment to replace their plant with the aid of foreign credit. The new plant will consist of a complete spinning mill with a production capacity of 500 kg of pure ramie thread, synthetic fibres and wool, and machines to supplement and modernize those already installed. The purchases, which will amount to some 3 million German marks, will be financed by the exporters in Germany. A cotton spinning plant with a capacity of 15,200 spindles, based on the new continuous automatic system developed in Japan, was also installed in 1963.

Jute production in Manaus, State of Amazonas, began to be expanded in 1962, with the aid of equipment which will enable the output of the existing plant to be doubled. The total investment is estimated at 400 million cruzeiros and will provide employment for an additional 500 workers.

In Mexico, the Nacional Financiera—an autonomous Government agency—is exploring the possibility of developing a programme for modernizing the wool industry. This programme derives its inspiration from the plan which President López Mateos stressed in his annual message to Congress, and in which he expressed the intention of completely modernizing the Mexican textile industry with a view to raising productivity, lowering prices and broadening its markets abroad.[7] For his part, the Chairman of the National Textile Association announced that in 1964 the Association would make every effort to secure the Government's co-operation in plans for specific and over-all integration, modernization and development of this important branch of the country's economy. In 1963, a new spinning mill was being set up, which represented an investment of 4 million dollars, while a weaving mill, equipped with 5,000 automatic looms and entailing an investment of 2 million dollars, was planned for Veracruz. Another plant, which has just entered into operation in San Bartolo Nalucalpan, Mexico State, and represents an investment of 2 million dollars, will start by manufacturing 36,000 dozen pairs of stockings monthly. Mexico continued to export to Indonesia in 1963, by virtue of the agreement in force with that country, its sales of rayon and synthetic textile materials amounting to 1 million dollars in value.

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[5] ECLA, *The textile industry in Latin America. II. Brazil* E/CN.12/623), Santiago, Chile, 1962.

[6] National Foreign Trade Council, *Noticias.*

[7] *Textile Industries*, February and March 1963.

After 1960, Argentina took advantage of a reduction in customs duties to undertake a fairly large-scale modernization of its textile industry, and of the wool sector in particular; this process was, however, slowed down by the economic crisis in the country. This led to a considerable increase in surplus capacity, since the existing machines were supplemented by new ones which in many cases were left to stand idle because they arrived in the country in 1962 when the recession was already having fairly intensive repercussions. Both textile production and employment slumped drastically. Although the drop in employment was less sharp than in production, fewer man-hours were worked, and entrepreneurs were forced by the crisis to rationalize operating conditions in order to prevent the mills from closing down altogether. Some measure of success therefore seems to have been achieved in raising productivity from the relatively low levels at which it then stood.[8] Steps have also been taken to improve productivity in Chile and Uruguay, where low productivity levels are instrumental in raising the cost of textiles.[9]

In Chile, the training of textile industry personnel at different levels has been intensified under the auspices of government bodies and with the co-operation of international agencies. Moreover, since 1863, the industrial sector has been working in conjunction with the Development Corporation (CORFO) and the Technical Co-operation Service—both government agencies—on the analysis of specific problems affecting the textile industry, under what is known as Operación Sectoral Textil.[10] Maintenance and spare parts are among the questions that have been studied.

In Uruguay, the high cost of labour as a result of low productivity in relation to wages led to the negotiation of an agreement in 1963 between the trade unions and the entrepreneurs, with a view to rasing the level of labour productivity.

Ecuador's textile industry has also taken part in the movement towards a rationalization of production, spurred on to a great extent by the competition it has been facing from Colombia's textiles in the form of unregistered exports. It has thus managed to make a considerable reduction in that type of trade, which has also suffered from the variations in the relative prices of the two countries in recent years.

2. PULP AND PAPER INDUSTRIES

In 1963 there was a further weakening in the growth rate of paper and paperboard production, particularly in the sector supplying fibrous raw material, that is to say, the pulp industry (see table 56).

A sharp decrease in the rate of paper production could already be discerned in 1962. The previous year the volume of Latin America's production had expanded by over 14 per cent, but in 1962 the rate fell to less than half. The downward trend was accentuated in 1963, since production increased by only 4.4 per cent, a figure which compares very unfavourably with the annual cumulative growth rate of 8.2 per cent recorded for the period 1960–63.

As regards pulp, the change in the tempo of production during 1960 to 1963 was very similar to that described for paper and paperboard. Over 16 per cent more pulp was produced in 1961 than in the preceding year, an increase which also outstripped, as in previous years, the increment in paper and paperboard production. This evolution testifies to the speed with which the industry is being integrated with a view to greater self-sufficiency in fibrous raw materials. In 1962 the rate dropped from 16.3 to 9.3 per cent, and in 1963 to slightly under 3 per cent, i.e., it fell below the rate of increase in paper and paperboard production, a fact which seems to indicate at least a temporary interruption in the integration process.

The decline in paper and paperboard production would be even more marked were it not for the fairly large-scale expansion of newsprint manufacture, especially in Argentina, where output doubled between 1962 and 1963. This upswing may, however, not be lasting, since it was probably due to changes in the utilization of production capacity as a result of the special market conditions prevailing in 1963.

It had been hoped that Brazil's production of newsprint would be twice as much in 1963 as in 1962, i.e., that it would rise to about 150,000 tons, but the fires which partially destroyed the plantations and forests supplying the raw materials caused production to drop sharply in the last quarter of 1963; the total for the year was therefore only 10 per cent higher than in 1962. There are indications that production has reached and even surpassed the target of 150,000 tons set for 1963.

In Chile, production showed a moderate increase. In Mexico, the output of the Tuxtepec mill, which is the only newsprint plant in the country, fell off by 4 per cent; in 1963 the production of paper for books—the bulk of which is used for textbooks which the Government distributes free of charge as part of its public education programme—absorbed a large proportion of the mill's capacity.

Although the relative increment in newsprint production was fairly satisfactory, it can only be interpreted correctly if it is borne in mind that the volume of production was very small in comparison with consumption; hence, there was no significant improvement in the degree of dependence on imports from outside the region, which continued to account for 75 to 80 per cent of consumption.

As regards other paper and paperboard (excluding newsprint), the figures in table 56 and observations made earlier in this section show that a very marked decline

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[8] ECLA, *La industria textil en Argentina* (in course of preparation). The Argentine Productivity Centre, which is co-operating with ECLA in this study, has, in the past two years, carried out productivity surveys in the cotton spinning industry.

[9] *La Industria Textil en América Latina. I. Chile*, United Nations publication, Sales No.: 63.II.G.5, New York, 1962, and ECLA, *La industria textil del Uruguay* (E/CN.12/691), Santiago, Chile, 1963.

[10] Textile Institute of Chile, *2a. Memoria*, 1963.

Table 56. Latin America: Paper, paperboard and pulp production

(*Thousands of tons*)

	Newsprint				Other paper and paperboard				Total paper and paperboard				Pulp			
	1960	*1961*	*1962*	*1963*	*1960*	*1961*	*1962*	*1963*	*1960*	*1961*	*1962*	*1963*	*1960*	*1961*	*1962*	*1963*
Argentina	9	9	12	23	282	371	353	322	291	380	365	345	73	89	88	102
Brazil	66	62	73	80	498	440	490	500	474	502	563	580	330	376	408	430
Chile	52	62	54	60	54	61	71	77	106	123	125	137	104	145	146	152
Colombia	—	—	—	—	51	69	97	100	51	69	97	100	8	17	27	28
Mexico	14	17	23	22	399	422	436	483	413	439	459	505	235	256	273	294
Peru	—	—	—	—	47	50	53	60	47	50	53	60	26	29	32	41
Venezuela	—	—	—	—	49	73	74	85	49	73	74	85	—	15	15	15
TOTAL	*141*	*150*	*162*	*184*	*1,200*	*1,486*	*1,574*	*1,627*	*1,431*	*1,636*	*1,736*	*1,812*	*804*	*935*	*1,022*	*1,052*
Rate of increase with respect to the preceding year . .		6.4	8.0	14.2		15.2	5.9	3.4		14.3	6.1	4.4		16.3	9.3	2.9
Cumulative annual rate of growth 1960–63 . .				9.5				8.0				8.2				9.4

SOURCE: Unpublished statistical data gathered by the FAO/ECLA/BTAO Regional Advisory Group on Pulp and Paper.

took place in the growth rate of regional production (from nearly 12 per cent in 1961 to 3.4 per cent in 1963) as a result of the sharp reduction in Argentina's output and the small increment in Brazil.

In Brazil, slack demand brought the growth of production virtually to a standstill, since in 1963 its rate was only 2 per cent more than in 1962. One of the most important projects, for the manufacture of 150 tons of Kraft paper a day in the Province of Santa Catalina, had to be postponed for financial reasons after a few small additions had been made to installed capacity. However, pulp production has progressed fairly well, thereby making it possible to continue actively with import substitution, the volume of imports being reduced by 25 to 30 per cent. If Brazil can keep the rate of output from dropping, it is likely to become virtually self-sufficient in this branch within a very short space of time, say, two or three years.

Argentina's economic difficulties caused paper and paperboard production to dwindle by nearly 10 per cent; by contrast, pulp processing, spurred on by tight import controls and the fully operational state of the semi-chemical pulp mill at Zárate, improved upon its level in the preceding year by 14,000 tons (nearly 16 per cent).

Work continued on the Ledesma project—an integrated mill using bagasse pulp with a daily capacity of 100 tons of printing and writing paper—and it is hoped to complete it in the course of 1964.

Mexico's production of paper and paperboard (other than newsprint) rose at a satisfactory rate, as it has done consistently for several years, thanks to steadily growing demand and an effective industrial development policy. The progress of Mexico's paper industry is matched by the upward trend of pulp production, thereby ensuring that good use is made of Mexico's enormous supply potential. In this respect, mention should be made of the spectacular increase in the production of bagasse pulp, which has transformed Mexico into the foremost Latin American producer of that type of pulp. Efforts are also being made to develop long-fibre pulp production; the principal mill for this product, at Chihuahua, is being expanded to almost double its previous capacity.

Both pulp and paper manufacturers are operating at high levels of capacity. In 1962 it was estimated that the utilization coefficient was 86 per cent for paper and 90 per cent for pulp. According to current expansion projects, paper production will go up to 700,000 tons and pulp production to 480,000 tons. The additional capacity is expected to enter into operation between 1965 and 1966.

In Chile, the only important exporter in the region, rapid progress has been made in enlarging the Laja plant to three times its existing capacity of 80,000 tons; the same can be said of the new newsprint mill at Nacimiento, which is expected to be in full production by mid-1964. This mill, the second of its kind in Chile, has an approximate capacity of 70,000 tons annually, which will be used entirely for export purposes.

Colombia, Peru and Venezuela recorded moderate increments in their pulp and paper production. In the case of the first two countries, however, these were sufficient to cover nearly all the demand for paper and paperboard, though not that of newsprint, and to keep imports of pulp to relatively low levels. Venezuela, on the other hand, had to import on a large scale to satisfy the growing demand for pulp products.

3. CHEMICAL INDUSTRIES

The presentation of over-all data on the recent development of Latin America's chemical industries is still beset by many difficulties. Apart from the shortage of statistics there are problems of comparability and coverage, first in relation to the lack of a standard industrial classification in the countries of the region, and secondly to inadequate differentiation in the production statistics available.

Table 57. Latin America: Sulphuric acid and caustic soda production in seven countries, 1959–1963

(*Thousands of tons*)

Country	Sulphuric acid					Caustic soda				
	1959	*1960*	*1961*	*1962*	*1963*[a]	*1959*	*1960*	*1961*	*1962*	*1963*[a]
Argentina .	148	127	132	129.4	116	40	34.7	41.0	42.7	44
Brazil .	170	200	240	276.0	280[b]	64.5	69	78	83	94
Chile . .	60	84	117	129.0	130[b]	5.4	6	6.4	6.6	7[b]
Colombia .	23	26	30.4	32.8	35[b]	23.1	25	28.1	26.6	33.1
Mexico .	243	288	276	339.0	390.0	49.1	65.9	71.3	83.4	92.1
Peru . .	24	38	37.1	36.6	38.6	1.7	2.8	6.6	7.9	9.1
Venezuela .	7	7	11.8	15.2	36.2	2.5	2.8	4.3	5.2	7.4
TOTAL	*675*	*730*	*844.3*	*958.0*	*1,025.8*	*186.3*	*206.2*	*235.7*	*258.4*	*282.7*

SOURCES: Argentina: various special publications; Brazil: Banco Nacional do Desenvolvimento Econômico (BNDE); Colombia: Departamento Administrativo Nacional de Estadística (DANE); Chile: Corporación de Fomento (CORFO); Mexico: Nacional Financiera S.A. (NAFIN); Peru: Banco Industrial; Venezuela: Oficina Central de Coordinación y Planificación (CORDIPLAN).

[a] Provisional figures.

[b] Estimates.

The evolution of the chemical industries has recently been marked by the initiation of some new production lines, especially in respect of fertilizers and petrochemical products, which for some years had been mere projects. Ammonia and fertilizer plants in Colombia, Costa Rica, El Salvador, Mexico and Venezuela are now fully operational, thereby considerably adding to the region's supplies which were formerly obtained from Brazil, Mexico and Peru. An example of incipient complementarity between countries is furnished by the plants in Central America, which use as raw material ammonia partly imported from Colombia. A fair amount of exporting took place—to other areas as well—on the basis of the temporary surpluses associated with the production of new items, including synthetic rubber in Brazil and fertilizer mixtures and ammonium nitrate in Central America and Mexico.

Table 58. Latin America: Caustic soda production, imports and apparent consumption in seven countries

	1959	*1960*	*1961*	*1962*	*1963*
Production[a]	186.3	206.2	235.7	258.4	282.7
Latin American imports[b] .	269.8	232.7	251.5	253.7	...
APPARENT CONSUMPTION	*456.1*	*438.9*	*487.2*	*508.1*	*530*[c]

SOURCF: As for table 57.

[a] There is practically no change in the remaining countries.

[b] There are no dates available on Cuba's imports.

[c] Estimate.

As regards basic products, the alkali industry made the greatest progress but is still unable to cope with the rapid growth of demand. Consequently, further efforts will have to be made to co-ordinate the installation of additional production capacity.

Increasing interest was shown in exploring the new paths opened up for the chemical industry by the application of the Montevideo Treaty. In several countries their interest crystallized in measures to promote the establishment of new plants capable of satisfying regional demand.

In Argentina the economic disturbances caused chemical production to fall steadily, as may be seen from the level of activity in some of the basic branches, such as sulphuric acid and caustic soda. In Brazil, too, a relative decline was observed in the growth rate up to 1962. Even Mexico registered a slight contraction in these basic branches. However, the effect of the new production lines mentioned above compensated for the relative recession in these branches and produced a credit balance, at least for Brazil and Mexico. In Argentina, however, the downward trend resulting from the sharp contraction of demand for chemical products in general remained unchanged.

Some figures given in table 57 for basic products processed in seven Latin American countries are fairly representative of recent trends. In the case of sulphuric acid, production virtually matched demand, imports being very small, whereas caustic soda was imported on a large scale despite the sharp upswing in local production (see table 58).

The impact of the new types of fertilizer produced—especially superphosphates and ammonium sulphate—gave rise to a steady increase in sulphuric acid consumption, which registered an average annual rate of growth of 8.2 per cent during the period under consideration as against 3.8 per cent for caustic soda; the latter rate is partly a question of the slower growth of traditional production items, such as soap, while output of caustic soda is limited, among other factors, by the lack of markets for its co-product, chlorine. Lastly, table 57 shows that there was a notable increase of 13 per cent in sulphuric acid production in 1962 as compared with only 2.4 per cent in 1963.

To complete the analysis of alkali production trends, an examination should be made of the figures for sodium carbonate production (soda ash) in the four countries concerned, imports from within the region and apparent consumption up to 1962 (see table 59). The annual average increase in consumption between 1959 and 1962 was 5.1 per cent, while production doubled in 1959–63, covering over 40 per cent of demand in the last year of the period. There are also two projects at a fairly advanced stage for the installation of three new sodium carbonate plants that will add considerably to the region's supply. Two of them are in Mexico (Sales y Alcalis and Industria del Alcali), and will have an annual output of about 240,000 tons starting in 1966. The third is in Colombia and will produce about 100,000 tons of sodium carbonate and caustic soda annually. In view of the expansion plans under way in other manufacturing plants, a total annual production capacity of some 650,000 tons is expected by 1967, which will balance Latin American demand at that time.

Table 59. Latin America: Production, imports and apparent consumption of sodium carbonate
(*Thousands of tons*)

	1959	*1960*	*1961*	*1962*	*1963*[a]
Production					
Brazil	—	18	39.7	69	76
Chile[b]	11	11	12	12[a]	12
Colombia	35.8	36	36	36	36
Mexico	63.7	73.9	74.5	80.9	96
SUB-TOTAL	*110.5*	*138.9*	*161.2*	*197.9*	*220.2*
Latin American imports	319.3	279.9	309.5	301.5	...
APPARENT CONSUMPTION	*429.8*	*418.8*	*470.7*	*499.4*	*520*

[a] Provisional figures.

[b] On the basis of nitrate.

Table 60. Latin America: Principal imports of chemicals, by selected groups[a]

Group of chemicals	*Value of imports (millions of dollars)*		*Percentage share of total*		*Cumulative annual rate of growth (1958–59 to 1962)*
	1958–59	*1962*[b]	*1958–59*	*1962*[b]	
Principal mineral chemicals	45	39	5.3	3.7	−4.1
Salts, oxides and other mineral chemicals	29	35	3.4	3.3	5.5
Organic chemicals	27	48	3.2	4.6	17.9
Chemicals for agricultural use	142	165	16.8	15.7	4.4
Plastics and synthetic resins	68	92	8.0	8.8	9.0
Raw materials for man-made fibres	30	70	3.6	6.7	27.4
Synthetic rubber and related products	39	63	4.6	6.0	14.7
Pharmaceutical products	175	204	20.7	19.4	4.5
Other chemicals	290	333	34.4	31.8	4.0
TOTAL	845	1,049	100.0	100.0	6.4

[a] Cuba is excluded for lack of recent data.

[b] Including provisional figures for Bolivia, Ecuador and Central America.

These general trends should be compared with some data on commodity trade. Since 1958–59 imports of chemicals from Latin American countries have been growing at a cumulative annual rate of 6.4 per cent, and reached a value of 1,049 million dollars in 1962. The share of this total represented by the largest countries —Argentina, Brazil and Mexico—remained stable at 47 per cent.

Within this average, some specific groups of commodities underwent fairly pronounced changes. Foremost among those registering the fastest rates of growth is the group of raw materials for man-made fibres with a rate of 27.4 per cent; their absolute value rose from 30 million dollars in 1958–59 to 70 million in 1962. This increment was due partly to new imports of raw materials in recent years, such as Brazil's purchases of adipic acid and adiponitrile which amounted to 8 million dollars in 1962, and partly to Mexico's imports of over 12 million dollars' worth of caprolactam.

Table 61. **Latin America: Principal exports of chemicals in 1962**

Country of origin and product	*Value (millions of dollars)*
Argentina	
Quebracho extract	12.0
Casein	9.9
Pharmaceutical products	2.5
Glycerin	0.7
Brazil	
Menthol	8.1
Essential oils	2.6
Ethyl alcohol	1.1
Pharmaceutical products	0.8
Chile	
Sodium and potassium nitrate	30.3
Iodine	3.6
Blasting gelatin	1.1
Mexico	
Natural and synthetic hormones and their esters	14.9
Resin	6.3
Litharge and red lead oxide	4.2
Other pharmaceutical products	3.1
Essential oils	2.6
Artificial fibre yarn and thread	1.5
Peru	
Essential oils	0.7
Ethyl alcohol	0.5
Venezuela	
Asphalt	11.3

The next groups in order of importance are organic chemicals, whose rate of growth was 17.9 per cent during the period in question; synthetic rubber and related products (14.7 per cent); and plastic materials and synthetic resins (9.0 per cent). The groups registering a negative trend (—4.1 per cent) included that of the principal mineral chemical products (—4.1 per cent). The uneven pace of group expansion had a marked effect on the structure of imports (see table 60).

Exports have not yet been greatly diversified, and traditional items continue to be the most important, with the exception of Mexico's exports of 2,300 tons of chlorine to the United States (see table 61).

In spite of the slow growth of Latin American exports (a cumulative annual rate of 5.2 per cent for 1959–62), which amounted to 149 million dollars in value in 1962, it is interesting to note the changes that took place in their distribution by country of origin. Mexico, for example, which ranked third in order of importance in 1959, rose to first place in 1962, largely owing to the exports mentioned above and to a wide range of minor products such as mineral salts, spirits of turpentine, prepared fertilizers, paraffin, varnishes, etc. (see table 62).

Table 62. **Latin America: Total exports of chemicals, by selected countries**[a]

Country	*Millions of dollars*		*Percentage share of total*	
	1959	*1962*[b]	*1959*	*1962*[b]
Argentina . .	36	33	28.1	222.1
Brazil . . .	6	15	4.7	10.1
Chile . . .	43	36	33.6	24.2
Mexico . . .	19	37	14.9	24.8
Venezuela . .	10	12	7.8	8.1
Others . . .	14	16	10.9	10.7
TOTAL, Latin America	128	149	100.0	100.0

[a] Excluding Cuba for lack of recent data.

[b] Including provisional figures for Bolivia, Ecuador and Central America.

In addition to the slow growth of exports, intra-regional trade in chemicals virtually failed to expand during the period in question. The 25 million dollars' worth of goods traded in 1959 rose to only 28 million in 1962, thereby keeping their proportion of the total at about 19 per cent throughout the period.[11] The countries that took the most active part in intra-regional trade were Ecuador, which exported nearly all its products to other Latin American countries; Colombia, whose regional trade accounted for about 57 per cent of its exports; Mexico and Argentina with 27 and 19 per cent, respectively; and countries like Brazil, Chile, the Central American nations and Venezuela, whose intra-regional trade represented about 10 per cent of their total exports.

Lastly, some comments should be made on recent activities of the chemical sector, in view of its tendency to establish new enterprises, and new lines of production in certain branches, such as those reviewed below.

(a) *Fertilizers*

This branch of activity has continued to develop, some noteworthy achievements being the entry into operation of the chemical complexes at Salamanca (Mexico), Cartagena (Colombia), Punta Arenas (Costa Rica) and Acajutla (El Salvador).

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[11] The proportion was 19.5 per cent in 1959 and 18.8 per cent in 1962.

The plant under construction at Cuzco (Peru) and the projects in course of implementation are further evidence of the notable expansion in the supply of nitrogenous fertilizers, which is a reflection of rapidly increasing demand in certain parts of the region, especially Brazil, Colombia, Mexico, Peru, and the five Central American countries.

The data available on nitrogen production and consumption in three countries cast more light on this trend (see table 63). If the initial output of Colombia and Venezuela is added, the sudden emergence of this branch of activity in the general picture of chemical production in 1963 becomes even more significant.

Table 63. Three Latin American countries: Nitrogen production and demand

(*Thousands of tons*)

	Production			*Demand*		
	1961	*1962*	*1963*	*1961*	*1962*	*1963*
Argentina[a]	...	...	...	8.5	11.9	8.6
Brazil[b]	12.8	18.0[c]	28.0[c]	55.0	60.0[c]	62.0[c]
Mexico[d]	54.7	73.1	90.8	122.5	144.5	208.2
TOTAL	67.5	91.1	118.8	186.0	216.4	278.8
Index	100.0	240.0	370.0	100.0	121.0	150.0

[a] SOURCE: Instituto Nacional de Tecnología Agrícola (INTA); Production was limited to about 2,000 tons annually; ammonium sulphate recovered from the coke ovens of the Sociedad Mixta Siderurgía Argentina (SOMISA).

[b] BNDE.

[c] Estimates.

[d] NAFIN.

New and important projects include a chemical complex for the production of ammonia, urea and other fertilizers in Argentina; the production of nitrophosphates and urea in Brazil by PROSUL and COPEB respectively; and lastly, the implementation of the plans drawn up by PEMEX, in Mexico, which will increase the output of ammonia.

(b) *Petrochemical products*

In keeping with the trend of events in the United States and European chemical industries, Latin American government and private sectors are taking an increasing interest in the development of the petrochemical industries in those countries that produce reasonably large amounts of petroleum and natural gas or have installed large refineries. Mexico, Venezuela, Argentina and Colombia come into the first of these two categories and Brazil into the second.

In view of this, and in relation to the projects that have been under study or in process of construction for some time, mention should be made of the progress achieved in the last two years, particularly in Mexico, where four industrial centres have recently been established—Minatitlán and Pajaritos, Salamanca, Ciudad Madero and Reynosa—to produce the raw materials needed for fertilizers, plastics, artificial fibres, synthetic rubber and aromatic hydrocarbons.

Mexico is currently producing dodecylbenzene for the manufacture of synthetic detergents in sufficient quantities to export to other Latin American countries, anhydrous ammonia, urea, ammonium nitrate, carbon black and mixed fertilizers containing nitrogen, phosphorus and potassium. At the planning stage are several other projects for the manufacture of synthetic rubber, ethylene, ethyl oxide, ethanolamines, ethylene glycols, polyethylene, methanol, phenol, polyester fibres, acetones and other derivatives. PEMEX, which is the State-owned petroleum enterprise, will produce basic aromatic hydrocarbons such as benzene, toluene and xylene, while private firms are to manufacture phthalic anhydride and plasticizers. Joint investment by a State-owned enterprise and a private concern in the production of tetraethyl lead (Pajaritos complex with Dupont) will satisfy domestic demand and leave a margin for export to other Latin American countries. By 1963 Mexico's investment in the petrochemical sector amounted to a cumulative total of 2,926 million pesos (about 234 million dollars), of which 63 per cent was invested by the Government, 18 per cent by mixed enterprises and 19 per cent by private concerns.

The following figures relate to Mexico's production of dodecylbenzene in 1960–63, which was fairly typical in its evolution:

	1960	*1961*	*1962*	*1963*
		(thousands of tons)		
Dodecylbenzene	10,314	19,600	27,213	20,584

Argentina's production of petrochemicals dates from 1943, but real interest in the industry was first taken in June 1961 when a decree was issued granting it the necessary incentives for its installation. The advantages of the system established by that decree include the doubling of tax deductions for investment and the accelerated amortization of investment for tax purposes; exemption from stamp duty for raw materials purchased from State enterprises; deferred payment of the tax levied instead of the charges applicable to the free transfer of goods; exemption from customs duties and foreign exchange surcharges in respect of imported machinery and equipment; and priority for the raw materials supplied by State agencies. Another decree issued in the same year accorded special concessions to industries—including petrochemicals—willing to settle in Patagonia. One of the most important projects is Petroquímica Argentina S.A. (PASA), with an investment capital of 72 million dollars, and a site of 400 hectares near the

YPF refinery at San Lorenzo. Its first phase will enter into operation in 1964 with an output of approximately 32,000 m^3 of benzene and toluene. The sections for the production of SBR synthetic rubber (35,000 tons annually) and polybutadiene (10,000 tons annually) have not yet been finished.

Argentina is already producing carbon sulphide of petrochemical origin, carbon black, isopropanol, polyethylene and phenol, and will shortly embark upon the production of methanol, synthetic ammonia and organic solvents. There are other projects under study whose execution will probably depend on the facilities that emerge from specific measures taken to integrate the markets of several countries as a result of the agreements promoted by ALALC.

Although the petrochemical industry is not a State monopoly in Brazil, its development is dependent upon the volume of raw materials that can be supplied by the refineries of the State enterprise PETROBRAS. Although lacking large petroleum and natural gas reservoirs, Brazil embarked in 1955 on the construction of petrochemical units for the production of ethylene, propylene, ammonia, ammonium nitrate, styrene, polyethylene, isopropanol, acetone, carbon black and methanol, which were nearly all in operation by 1959 to 1960. Subsequently work began on the construction of a synthetic rubber plant (SBR), which entered into operation in 1962. Notwithstanding an installed capacity of 40,000 tons of SBR rubber annually, output was only 29,900 tons in 1963, of which 1,480 tons were exported to other Latin American countries. The plant still has to import the butadiene and styrene it needs as raw materials, since it has not yet been possible to build plants for producing these monomers.

A plant is being built as part of the Cubata petrochemical complex in São Paulo to produce ethylene by petroleum cracking, with the aim of providing private firms established in the vicinity of the refinery with a larger supply of ethylene. It is also planned to build a unit for the reduction of iron ore, based on the natural gas available in the State of Bahía and the "H and L" process developed and successfully applied in Mexico.

In Venezuela, where the enormous volume of natural gas and other resources available permit of highly ambitious plans for the petrochemical sector, activities were initiated with the construction of the plant owned by the Venezuelan Petrochemical Institute (IVP) at Morón. This industrial complex, which now comprises eighteen units, is made up of three groups of plants: the first, for the production of soda chloride, the second for refining, and the third for the manufacture of fertilizers; the last group has been able to produce all the nitrogenous and phosphate fertilizers consumed by Venezuela since 1961.

The IVP expansion and integration plans provide for: (*a*) the expansion of refining capacity to 7,300 barrels a day; (*b*) the construction of an explosives factory with a total annual capacity of 23,500 tons, covering ammonite, ammonagelatin, primers and blasting agents, which is expected to result in a saving of nearly 25 million bolivars in terms of foreign exchange; and (*c*) the building of a polymerization complex for the production of synthetic rubber, plastics, detergents and aromatic hydrocarbons.

It is also planned to build a factory of anti-detonating additives for the petroleum industry, which may have good export possibilities in the Latin American market. The investment required to enlarge the Morón complex is estimated at approximately 150 million bolivars (about 38 million dollars).

In Colombia, a synthetic ammonia plant entered into operation at Cartagena, together with the supplementary units of that complex, such as the plants manufacturing urea (7,500 tons annually) and mixed fertilizers (120,000 tons annually). Another ammonia plant is being constructed at Barracabermeja for the manufacture of ammonium nitrate and urea, and two plants are being set up to obtain ethylene, propylene and sulphur from refinery gases. Projects for the production of benzene, toluene, xylene, dodecylbenzene, styrene, polyvinyl chloride, polyethylene and other less important items are under consideration.

(c) *New production lines*

In relation to other recent projects, mention should be made of the satisfactory operation of a carbon black plant in Argentina which was inaugurated in 1962, and exported small quantities to neighbouring countries through the channels opened up by the ALALC agreements. Mexico's new plant, with an annual capacity of 25,000 tons, added to the production potential in 1963. In this country, too, work is proceeding on a plant for the production of caprolactam, an intermediate product in the manufacture of nylon-6.

Colombia has started to manufacture cellophane and has projects under way for the production of polyvinyl chloride, explosives, polystyrene, sodium silicate and potassium. The Inter-American Development Bank has agreed to give 12 million dollars to the sodium carbonate project, which is expected to have an annual output of 100,000 tons.

There are projects well under way in Nicaragua for initiating the production of caustic soda, chlorine and the latter's derivative, toxaphene, in sufficient quantities to meet Central America's requirements.

As regards Peru, mention should be made of the new plants manufacturing aluminium sulphate and calcium carbide; the latter, which has an annual capacity of 3,000 tons, is located at Chimbote. Production capacity for lead arsenate was increased to 3,600 tons annually, and the installation of the phosphorus plant, which has been supplying the market since the end of 1962, was duly completed. The plant at Chicamayo, Cuzco, which has been referred to earlier, will contribute annually about 15,000 tons of ammonia obtained by means of hydroelectric energy, a method that is being used for the first time in a Latin American fertilizer plant. Lastly, work was begun on projects which are expected to double Peru's production capacity for caustic soda.

In Venezuela, a start was made on the production of carbon black (NEGROVEN), which reached 1,900 tons in the course of 1963, and on the manufacture of sodium silicate and polyvinyl acetate.

4. THE CEMENT INDUSTRY

In 1963 Latin America's cement production was a little over 3 per cent more than in the preceding year. This represents a considerable decline in the rate of growth, which had been 6 per cent in 1962 and 5.2 per cent between 1955–60 and 1963 (see table 64). The cement industry has been characterized by violent short-term fluctuations, no doubt because of the relatively irregular nature of building activities and because the import substitution process, already completed in most countries, has failed to act as a buffer.

Table 64. Latin America: Cement production

(*Thousands of tons*)

Country	1961	1962	1963
Argentina	2,879	2,851	2,500
Brazil	678	5,039	5,180[a]
Chile	883	1,022	1,050[a]
Colombia	1,579	1,719	1,770
Mexico	2,984	3,266	3,760
Peru	653	660	770
Uruguay	371	440	450[a]
Venezuela	1,513	1,535	1,570
TOTAL	15,542	16,540	17,050
Rate of increase with respect to the preceding year		6.4	3.1
Annual cumulative rate of growth from 1955–60 to 1963			5.2

SOURCE: Calculated on the basis of information received directly from correspondents; the 1963 figure for Brazil was estimated on the basis of the production figure for nine months, as published in *Conjuntura Econômica, Retrospecto*, 1963.

[a] Estimates.

The more sluggish tempo of growth in 1963 was mainly due to the stagnation of production in Brazil and to the substantial reduction of nearly 13 per cent in Argentina. Brazil's production capacity continued to expand, albeit slowly, and in areas far from the industrial centres. Thus, the new factory in Pará reached full capacity in a very brief span, under the stimulus of renewed building activities in Belén, Aracapá, Manaos and various parts of the lower Amazonas. There were also relatively modest production increases in Paraíba, Minas Gerais, Paraná and Goias. It is to these and other increases on the same scale that Brazil owes the slight improvement that did take place in its cement production in 1963, since the São Paulo and Rio de Janeiro factories suffered the worst effects of the general recession and their production remained virtually stationary.

The drop in Argentina's production was reflected in an under-utilization of production capacity, which operated at slightly over 60 per cent. Production in the second half of 1963, however, showed signs of reviving, since total output was over 1.250 million tons, or 5.4 per cent more than in the first six months, and only 8.2 per cent less than in the same period of the preceding year. The information for the last few months of 1963 and the early part of 1964 does not provide grounds, as in other industrial sectors, for asserting that the building industry has made a sound recovery; it is, in fact, probably still tending to decline.

Mexico, on the other hand, increased its production by 15 per cent, following upon a rise of 9 per cent in 1962. Even this rate is fairly high in comparison with those of the other Latin American countries. By 1958, nearly all imports (about 2 per cent of production), which were destined for particularly remote areas, had been eliminated. Production had increased at an annual average rate of 8.3 per cent in the fifties, thus keeping pace with the growth of the building industry. Throughout that period, the building industry was stimulated by the development of public investment—which absorbed nearly 65 per cent of the industry's activities between 1956 and 1962—and by the expansion of private construction activities. From 1960 onwards, public expenditure allocated to housing and other buildings increased rapidly, but was not enough in 1961 to offset the drop in private investment, thereby bringing about a decline in cement demand and, consequently, in production rates. The expansion projects, both planned and under way, which were initiated in 1962, represent an annual increase of 913,500 tons in capacity, thus bringing production potential up to 5.172 million tons by 1964. Some of the main problems confronting the cement industry are connected with the existence of surplus capacity—although the situation improved in 1963 when building activities revived—and with the high freight costs for the volume of production (nearly 50 per cent) that is not transported by rail. This last factor has prevented the expansion of cement exports to the Central American and other countries.

5. THE STEEL INDUSTRY

Between 1960 and 1963 Latin America's production of pig-iron expanded by 48 per cent, and that of crude steel[12] by 45 per cent, while the increments between 1962 and 1963 were 20 and 18 per cent, respectively. Table 65 shows steel production trends in the different countries during the four-year period concerned.

Table 65 groups together the crude steel production not only of the integrated plants with blast furnaces or other iron-ore reduction methods, but also of the semi-integrated plants, however small, such as the one in Uruguay and the one in Central America, which buy scrap iron locally and smelt it in their own steel mills.

With the exception of the Compañía Siderúrgica Paulista (COSIPA), in São Paulo, Brazil, whose blast furnaces and steel mill are not yet in operation, the period covered by table 65 witnessed the entry into production of all the major projects for new steel-making installations under construction in Latin America. Table 66 gives some figures for three of the plants in question, and those for COSIPA have been added in order to demonstrate the relative importance of the new projects with respect to the existing traditional industry.

The San Nicolás plant in Argentina includes a complete rolling mill shop, with an annual capacity of 2.5 million tons of crude steel, and is equipped with the most up-to-date and efficient continuous mill for flat products in Latin America. Notwithstanding the fact that Argentina's potential demand would warrant its immediate operation at full capacity, financial difficulties have made it impossible to undertake the remaining installations needed to reach total capacity, that is, coke ovens, blast furnaces and a steel mill. Even the plant for tin-plate finishings has yet to be completed, although Argentina is a heavy importer of that item for its canning industry. Despite these considerations, the possibility of constructing new plants in other parts of the country is being explored.

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[12] For the sake of uniformity in the assessment of steel production, this term will be used for steel ingot or crude steel. An average of 1.33 tons of ingot are required to produce 1 ton of finished rolled products.

Table 65. Latin America: Production of pig-iron and crude steel

(*Thousands of tons*)

Country	*Pig-iron*				*Crude steel*			
	1960	*1961*	*1962*	*1963*	*1960*	*1961*	*1962*	*1963*
Argentina . . .	181	399	396	398	277	442	645	894
Brazil	1,883	1,821	2.010	2,375	2,245	2,482	2,587	2,812
Central America . .	—	—	—	—	—	8	9	9
Chile	266	285	383	417	453	396	526	543
Colombia . . .	775	188	145	207	172	197	156	220
Mexico . . .	669[a]	758[a]	801[a]	1,003[a]	1,492	1,693	1,711	2,017
Peru	34	51	38	45	60	74	71	75
Uruguay . . .	—	—	—	—	10	10	7	7
Venezuela . . .	—	7	173	283	47	71	142	358
Latin America . .	3,209	3,509	3,946	4,728	4,756	5,373	5,854	6,918
Rate of increase with respect to the preceding year	—	9	12	20	—	13	9	18
Cumulative annual rate of growth . . .	—	—	—	14	—	—	—	13

SOURCES: 1960–62: Instituto Latinoamericano del Fierro y del Acero (ILAFA), *Monografías nacionales*; the annual reports of the Colombian and Peruvian plants, and the *Anuário Estatístico do Brasil*. For 1963: estimates by ILAFA and ECLA, Industrial Development Division.

[a] Including spongy iron produced by Hojalata y Lámina S.A., Monterrey, Mexico.

The Orinoco plant in Venezuela cannot keep its first stage operating fully as it lacks sufficient rolling capacity to absorb all the pig-iron and steel produced. It was originally designed to produce 300,000 tons of welded piping annually, mainly for the domestic petroleum industry. However, the sharp contraction in the industry's exploration and expansion activities has caused the domestic market to shrink. Venezuela is endeavouring to export its surplus piping, but in view of the large tonnages involved and the existence of industries of the same kind in other countries, it is unlikely that its export trade will reach the desired proportions. As an alternative measure, the possibility of installing a rolling mill for flat products to absorb the ingot surplus is being studied.

The USIMINAS steel mill in Brazil has the necessary equipment for rolling very wide sheet of up to 2 metres in breadth. The cold-rolling plant has not yet been installed because of financial difficulties, and in the meantime USIMINAS has been delivering slabs of standard width to COSIPA for rolling in São Paulo.

After the port, approach canal and other civil engineering works had been completed at the COSIPA plant near the port of Santos on the São Paulo coast, doubts were expressed as to the safety of the rolling mill which, like all the other plant units, is situated on swampy land which does not offer a firm foundation. The rolling mill was installed first and has temporarily been using slabs manufactured at the USIMINAS and Volta Redonda plants. If, as is hoped, good results are obtained, the steel mill and blast furnaces will be installed next.

Although the first stage of the three new plants that have entered into operation was not yet functioning at full capacity in 1963, the new installations are of great importance in relation to the rest of the industry. With COSIPA included, their combined capacity at the first stage would amount to 2.4 million tons of crude steel, whereas the total output of the older plants in Latin America was 5.8 million tons in 1963. The first stages of the four new plants would therefore represent an increment of over 40 per cent in the previous level of capacity.

The increase in the capacity of these four new plants in their final phase (7.8 million tons) does not represent the entire body of expansion projects at their different stages of planning or execution, since nearly all the older plants are planning to make additions to one extent or another which would amount to several times as much as the total volume of output in 1963. For example, the Volta Redonda plant is proposing to raise its present output of 1.25 million tons to 3.5 million in two successive stages. The Huachipato plant in Chile has decided to push production up from 0.5 million to 1 million tons in the next few years. Other plants actively engaged in expanding their production are Paz del Río (Colombia), from 220,000 to 300,000 tons; Chimbote (Peru), from 75,000 to 220,000 tons; and Hojalata y Lámina S.A. (Mexico), from 280,000 to 500,000 tons, while Altos Hornos de México, Monclova, and the Fundidora de Monterrey completed large-scale expansion projects in 1960–63 and are now consolidating their production in view of the recent contraction in Mexico's steel market.

As regards the increase in the production capacity of Latin America's steel industry, it should be borne in mind that a completely new plant producing 1.5 million tons or more requires an investment varying from 350 to 400 dollars per ton/year,[13] while a plant with an annual output of less than 1 million dollars entails an investment of 550 to 650 dollars per ton/year. On the other hand, in view of the nature of the equipment needed for the different departments of a steel industry (coke ovens, blast furnaces, steel mill and rolling mill), in the construction of which all kinds of indivisible factors intervene that may make it necessary to combine a unit of unduly large size with equipment designed for lower levels of production, expansion projects while tending to balance all these discrepancies usually require a far smaller outlay, which could be estimated at an average of 50 to 150 dollars per ton/year. Consequently, given the general shortage of capital in Latin America, the best way to increase production is to expand the existing plant until it achieves maximum capital productivity, which generally goes hand in hand with maximum labour productivity.

Table 66. Latin America: Information on important new plants

(*Thousands of tons capacity*)

Plant and country	*Date of entry into operation*	*Crude steel capacity*	
		First stage	*Final stage*
San Nicolás, Argentina	Blast furnace, July 1960 Steel mill, May 1961 The tin-plate section is not yet in operation	650	2,500
Orinoco, Venezuela	Electric reduction furnace, November 1961 Steel mill, July 1962	750	1,300
USIMINAS[a] Minas Gerais, Brazil	Blast furnace, October 1962 Steel mill, shortly afterwards The cold-rolling section is still to be installed	500	2,000
Total number of plants in operation		*1,900*	*5,800*
COSIPA, São Paulo, Brazil	Steel rolling, with material from USIMINAS or Volta Redonda, has been undertaken on a limited scale since December 1963	500	2,000
Total number of large scale new integrated plants		*2,400*	*7,800*

Source: ECLA, Industrial Development Division.

[a] Usinas Siderúrgicas de Minas Gerais S.A (USIMINAS), Ipatinga, Minas Gerais, Brazil.

In the case of many of the existing units, technological improvements have been introduced even since they were first set up, which make it possible to obtain considerable increases in production at very little cost by modernizing existing plant. These possibilities should be carefully weighed up when the question of expanding existing capacity and equalizing the capacity of the different departments is raised. The importance of this aspect of the problem is illustrated by the figures in table 67 relating to the capacity of the Huachipato blast furnace, which began operations in 1950.

It will be seen from the figures that the capacity of the blast furnace was doubled in fourteen years, thanks to the application of all the new techniques that could justifiably be used. The blast furnace operates on the basis of natural Chilean ore without any processing other than simple washing and exact grading of the burden, that is, neither sinter nor pellets are used, but only a natural ore with an iron content of 63 to 64 per cent.

The satisfactory development of Latin America's steel industry (see again table 65) warrants a short retrospect in order to see how far domestic production has fulfilled the objectives of the many Governments that have played a direct part in or sponsored the establishment of the industry in the different countries. The figures in table 68 are presented for this purpose. They show domestic production and imports of direct steel products in terms of crude steel, with respect to selected years and most of the Latin American countries with a long steel-making tradition.

Table 67. Chile: Pig-iron produced in the Huachipato blast furnace, by cubic metre of working volume

(*Tons per m³ in 24 hours*)

Year	*Production*
1950	0.80
1955	1.07
1960	1.12
1961	1.38
1962	1.44
1963	1.61

Source: ECLA, Industrial Development Division.

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[13] Excluding the cost of railways, ports and other installations of this kind, and housing for personnel should the plant be far from a large population centre. These extra items can easily add 15 to 40 per cent to the basic investment per ton/year.

According to table 68, apparent steel consumption in the five Latin American countries concerned between 1930 and 1962 increased by 305 per cent. The entire increase was based on domestic production which expanded by 445 per cent whereas imports remained at the same level. Moreover, steel imports are obviously influenced by the over-all economic situation; they were less in 1940 than in 1930 because of the difficulty of importing during the Second World War, and in 1962 fell below their 1960 level as a result of the deterioration in the economic situation, mainly in Argentina and Brazil, and, to a lesser extent, in Mexico. If the findings set forth in this table are applied to Latin America as a whole, it may be concluded, in view of the fact that the countries' capacity to import is limited, that steel consumption will probably keep only a short step ahead of regional production.

Table 68. Latin America: Steel production and imports in selected countries and years[a]

(*Thousands of tons of crude steel*)

Country	*1930*		*1940*		*1950*		*1960*		*1962*	
	Production	*Imports*	*Production*	*Imports*	*Production*	*Imports*	*Production*	*Imports*	*Production*	*Imports*
Argentina	—	1,113	24	736	130	892	277	1,552	894	1,220
Brazil	34	330	180	387	761	351	2,282	571	2,812	230
Chile	—	327	31	150	71	148	422	92	548	117
Colombia	—	60	—	107	—	202	172	214	220	196
Mexico	118	105	173	122	463	301	1,539	318	1,694	193
TOTAL	*152*	*1,935*	*408*	*1,502*	*1,425*	*1,894*	*4,712*	*2,747*	*6,168*	*1,956*
Production plus imports	2,087		1,910		3,319		7,459		8,124	
Percentage increase between periods			−8.5		+74		+133		+13	
Total percentage increase									+305	

SOURCES: For 1930–60, ECLA, *Inter-regional Symposium on the Application of Modern Technical Practices in the Iron and Steel Industry to Developing Countries* (Technical Paper A.5). For 1962: data supplied by the Instituto Latinoamericano del Fierro y del Acero.

[a] Imports include finished and semi-finished rolled products, but no steel products.

Furthermore, the fact that the Latin American steel-producing countries continue to import is partly due to the inability of many of the plants to attain the output required by the countries concerned. There is another reason, too, as exemplified in the case of Chile. This country has been regularly exporting sizable quantities of steel and, in turn, importing on an even larger scale. It is compelled to do so by the fact that the Huachipato plant is not capable of producing the whole range needed by the industry, and in any case would not be economically justified in doing so. This is a case of specialization which is fitting only for broader markets such as ALALC, but would probably surpass even the possibilities of the country with the foremost steel industry in the region, namely, Brazil.

6. THE METAL-TRANSFORMING INDUSTRIES

Broadly speaking, the metal-transforming industries were not unaffected by the industrial recession experienced by the region in 1963. As early as 1962, statistics of the quantum of production revealed a notable decline in its rate of growth, which was only 1.6 per cent as against rates of over 10 per cent registered in the immediately preceding years. A preliminary estimate of the contraction in the industries' output in 1963 places it between 7 and 9 per cent. However, the adverse turn of events for the region as a whole did not affect all countries or all branches grouped under the generic term "metal-transforming industries" (metal products, machinery, including electrical equipment, and transport material and equipment) to the same extent.

The data available—which are deficient and very fragmentary—do not make for a very thorough analysis and its present trends, or for an up-to-date description of the main developments in 1963. In general, it may be asserted that the decline in the activities of the metal-transforming sector was due largely to the contraction which took place in the major Latin American countries, particularly Brazil and Argentina. The latter witnessed a sharp drop in the sector's production after 1962, and by the end of 1963 it had sunk nearly 60 per cent below its 1961 level, despite the improvement in the last few months of the year. The crisis was much less serious in Brazil, being felt only in 1963.

The branches most gravely affected in the metal-transforming sector were the production of durable consumer goods and, more especially, the motor-vehicle industry. This trend was not generally apparent as far as capital goods are concerned. On the contrary, some manufacturing sectors showed an improvement with respect to 1962. In Argentina, for example, the electrical machinery and appliances branch was in a more favourable position than in the preceding year, with a quantum index of production that was nearly 10 per cent higher; at the same time, new investments of about 2 million dollars were announced for the end of the year, for the establishment of additional industries and the expansion of existing lines such as industrial hand tools, machine-tools, air-cooled Diesel engines, pressure valves and regulators, etc.

In Brazil, new investments were made, though more slowly than in preceding years. In respect to shipbuilding installations, more than 25,000 million cruzeiros were invested to raise capacity to 180,000 tons dead weight. Capital was also sunk in production of large Diesel engines, in which the firm MAN invested about 1 million dollars; road-making and boring machinery; and ball-bearings, whose production increased upon the entry into operation of the S.K.F. factory with a daily capacity of 17,000 units. In addition, extensive orders were placed for various types of capital goods. On the whole, the basic quipment industry kept up its level of activity in order to meet the orders pending from the previous year, particularly for turbines and heavy electrical equipment for the hydro plants under construction. Likewise, the volume of tractor production was 12 per cent more than in 1962.

Similar efforts to intensify the manufacture of machinery, equipment and capital goods in general were made in Mexico in 1963. They took the form of the installation of a Diesel locomotive assembly plant at San Luis de Potosí, with an annual production capacity of 10 units; the manufacture of the first mechanical dredge with a 60-per-cent domestic content; measures to initiate the production of internal combustion engines, and incentives for the manufacture of agricultural machinery and forgings in general.

In the other countries the metal-transforming sector has followed a rising trend, the growth rates of production in Chile and Peru being over 13 per cent higher than in 1962. The expansion was based largely on durable consumer goods and the intensification of import substitution in these items. Illustrative of this trend are the installation in Colombia of several plants for assembling radios, motor-scooters, television sets, typewriters and sewing-machines, and the establishment of a firm for the manufacture of agricultural machinery and another for sewing-machines. Likewise, a start has been made on assembling typewriters in Chile. In Quito, Ecuador, a refrigerator factory has been installed with an investment of 5.4 million sucres; a sewing-machine factory has also been set up in the same country, with mixed Japanese–Ecuadorian capital, as well as a battery and dry-cell factory with an investment of 2.5 million sucres, a nail and screw factory with an investment of 1 million sucres, and a joint enterprise, based partly on Chilean capital, for the production of metal structures with assets amounting to 30 million sucres. A Brown Boveri factory was set up in Peru for the manufacture of transformers and electrical switch gear, and a plant for assembling refrigerators, kitchen stoves and other household appliances entered into operation in Venezuela.

Mention should also be made of the motor-vehicle industry, one of the metal-transforming branches that is spreading throughout the region, and made notable progress in 1963 in both national and integration plans.

Table 69 shows the levels attained by the manufacture of motor vehicles in Latin America in the past two years. It bears out the comments made above with respect to the recession in Argentina and Brazil, and the improvement over 1962 levels in the remaining countries.

It should be borne in mind that the effect of a drop in motor-vehicle manufacture is greater than the figures themselves would appear to indicate because of this branch's importance for a broad segment of the metal-transforming industry which is closely allied to it, particularly in those countries that have already reached a high level of nationalization.

The motor-vehicle industry in Argentina has met with serious difficulties owing to the shortage of foreign exchange and the unstable economic situation of the country. Its dependence on imported inputs and the state of the market brought about a drop in production in 1962, which became sharper in 1963, though a gradual improvement was noted in the last few months of the year. Moreover, since most of the backlog of orders that has been piling up for years has now been dealt with, future production will depend upon the normal growth of demand, which is basically governed by income and population growth and replacement needs. In this respect, it should be noted that nearly 50 per cent of the motor-vehicle inventory is of domestic origin. Other difficulties that exist are attributable to the lack of a clear-cut and sustained policy for the industry. However, new decrees were issued during the period in question to speed up the nationalization of the motor-vehicle industry, and some progress was made in the manufacture of parts and pieces, including the investment of 5 million dollars by a United States firm in a lorry-axle plant, several new ventures in the production of electrical equipment with foreign patents, and others in the manufacture of internal combustion engines.

Table 69. Latin America: Manufacture of motor vehicles, 1962 and 1963
(*Units*)

Argentina	*129,014*	*105,424*
Passenger cars	84,848	72,103
Jeeps	32,067	25,334
Lorries	12,099	7,987
Brazil	*191,194*	*174,126*
Heavy lorries and buses	4,113	3,478
Medium-weight lorries	35,557	20,546
Freight and passenger trucks	54,390	50,157
Utility trucks and vans	22,247	13,922
Passenger cars	74,887	86,023
Chile	*6,991*	*5,149*
Passenger cars	4,593	3,841
Trucks, lorries and jeeps	2,398	1,308
Mexico	*66,000*	*75,700*
Passenger cars	41,700	48,900
Lorries and buses	24,300	26,800
Venezuela	*11,666*	*24,440*
Passenger cars and trucks	8,768	18.090
Delivery vans and lorries	2,898	6,350
TOTAL	*404,865*	*384,839*

Sources: Argentina: *Economic Survey of Latin America*; Brazil: *Anuário Estatístico do Brasil*; Chile: Junta de Adelanto de Arica; Mexico and Venezuela: data supplied by producers.

Brazil has succeeded in placing its motor-vehicle industry on a sound basis. The units now being produced contain, on an average, 96.4 per cent of domestic materials in terms of weight, thereby surpassing the targets fixed by the Government which no longer exercises special control over the industry. Production, which rose sharply from 1961 to 1962, fell in 1963 as a result of credit restrictions which affected long-term sales, particularly during the first half of the year. In the second half, the situation was considerably eased by means of financing systems, applied by the manufacturing companies themselves, which prevented the output of passenger cars from declining below its 1962 level, even though its rate of growth was only 15 per cent as against 36 per cent between 1961 and 1962. The projects materializing are mainly intended to expand existing plant to bring it into line with the evolution of demand, and to improve certain basic products such as malleable iron castings, in which a local concern has invested nearly 2 million dollars. Despite the increase in new types of vehicles manufactured, the number of manufacturers has remained the same.

Great activity has been noted in the other Latin American countries in general, some taking steps to consolidate the position of the industry and others embarking upon production, after having first installed assembly plants.

In Mexico, vehicle assembly has suffered severe vicissitudes in the past as a result of changes in the economy and fluctuations in imports, the latter being most marked in respect of passenger cars. From 1961 onwards a reduction took place in the number of assembled cars, and production did not recover until 1963. Lorry assembly has remained at more or less the same level since 1951, i.e., 20,000 units annually. The last few years have witnessed the increasing use of locally manufactured parts, under the stimulus of the Government's policy to integrate the motor-vehicle industry. Among the most important measures adopted during the period in question were tax reductions and the establishment of ceiling prices with a view to expanding domestic demand and channelling it towards certain types of motor cars, restricting imports of vehicles in general and placing an embargo on imports of cars of more than six cylinders. In September 1960 it was decided to standardize parts in order to facilitate the establishment of allied industries and to fix a minimum level of 60 per cent of production cost for locally manufactured items. This policy led to a reduction in the number of makes from 44 in 1960 to 22 in 1962 and to 8 in 1963. It was also successful in curtailing passenger car imports between 1959 and 1961 by nearly 20 per cent. In 1962 it was estimated that 23 per cent consisted of domestic parts such as upholstery, tyres, electrical accessories, silencers, brake-linings, etc. In 1963 the manufacture of radiators, chassis, distributor circuits and wheels was added, and a plant for producing transmission systems for a capital cost of 140 million pesos was in process of installation.

In Colombia, regulations with respect to the quantity of domestic raw material that should be used in the manufacture of vehicles were put into force in 1962. That same year the Fábrica Colombiana de Motores entered into operation, assembling 1,614 vehicles with a domestic content of 22 per cent in terms of weight and 35 per cent in terms of value, and in 1963 it requested government approval to raise its annual output to 5,000 units. At the same time, the Ministry of Development accepted the proposals made by the Consorcio Colombo-Alemán, Ford and General Motors for the manufacture and assembly of vehicles in Colombia. It also agreed to the formation of the Colombo-Español consortium composed of Automotores Pegaso de Colombia, Automotores y Maquinaria Agrícola, Roa Hispano-Colombiana and Studebaker, and suggested that Barreiros Diesel, Chrysler International and Nissan Motors should also form a combine. The establishment of these enterprises will represent an investment of 1,000 million pesos. Vehicle demand in 1963 was estimated at 31,000 units.

In Chile, a United States firm requested authorization to import 2.5 million dollars' worth of machinery and equipment for the purpose of setting up a plant to manufacture lorries, buses and trucks, and the Government has issued new legislative decrees in connexion with the motor-vehicle industry.

Peru is also giving preferential treatment to motor-vehicle assembly with a view to encouraging its development. As a result, Nissan Motors, of Japan, will be building an assembly plant for Datsun cars and jeeps at a capital cost of 4 million dollars, while General Motors will invest about 3.7 million dollars in the assembly of Chevrolet and Opel cars, based on an annual capacity of 5,000 units. Ford and Chrysler have also requested authorization to install plants in Peru.

Venezuela banned imports of assembled motor vehicles in 1963 in the hope of boosting domestic industry. That same year the Fábrica Industrial Automotores Venezolana began operations by assembling eight vehicles a day—for an investment of 12 million bolivars—and Rootes Motors opened an assembly plant at Valencia for British cars, with an investment of 5 million bolivars. This brings the number of assembly plants in Venezuela up to seventeen, for a total investment of 50.3 million bolivars. As regards motor-vehicle parts and pieces, a plant producing shock-absorbers, oil filters and brake-linings entered into operation, and a factory for the manufacture of springs was completed.

These countries are now bent on increasing the domestic content of the vehicles manufactured by encouraging local production of parts and pieces or concluding agreements with other countries, thereby taking the first steps towards the regional integration of the industry. Agreements to this effect specifying the measures to be taken to achieve complementarity in the industry were signed in 1963 between Argentina, Brazil, Chile and Uruguay.

Chapter V

TRANSPORT

INTRODUCTION

An analysis of the most important developments and trends recently registered in the Latin American economies should deal with at least a few of the salient features of the evolution of transport facilities and the problems arising in that field. Their inclusion is justified from several points of view, some general and others more specific.

One of the general considerations to be borne in mind is that the transport sector is at present responsible for a significant proportion of Latin America's gross product, and accounts for a still larger share of the region's total capital formation. At the same time, requirements in respect of expanding, maintaining and improving transport infrastructure, as well as replacing and increasing equipment, annually absorb investment funds that call for an extensive internal savings effort and a substantial contribution from foreign capital.

Within the transport sector itself, major structural changes are taking place, their main feature being a relative contraction of railway traffic and a sharp increase in motor-vehicle traffic. They have serious implications, which must be taken into consideration in analysing previous trends and making projections for the future.

In view of the fact that most of the problems are substantive, with roots that reach back far beyond recent developments, the changes which have occurred in the transport sector in the immediate past must be evaluated in the light of long-term conditions. Hence, in the paragraphs that follow the numerous references made to the 1960–63 period will be supplemented by essential data relating to events which occurred in the fifties or earlier.

A description and analysis of all the manifold factors affecting the various transport media in Latin America would of course be out of place here.[1] An attempt has therefore been made to limit the substance of the present chapter to the aspects considered essential for the purposes of a document concerned chiefly with the trends and changes of most immediate importance: evolution of traffic, recent modifications in transport systems and equipment, and some economic and financial questions, with specific reference to transport development programmes, external financing and the financial position of the main railway systems in Latin America.

A. EVOLUTION OF TRAFFIC

Generally speaking, the recent evolution of traffic—in terms of internal and external traffic, passenger transport and freightage, and the various means of transport used—has continued in line with the trends that emerged after the Second World War. Accordingly, prior to more detailed examination of the chief factors that have come into play in the past few years, some idea should be given of these overall trends, at least in broad outline, with particular emphasis on the main changes that occurred between 1950 and 1960.

As regards carriage of freight by the various means of inland transport, the most striking feature has indubitably been the remarkable increase in motor-vehicle traffic. The magnitude of the changes observable in the past ten years can be more clearly appreciated in the light of available data and estimates for six of the principal Latin American countries: Argentina, Brazil, Chile, Colombia, Costa Rica and Mexico (see table 70). While the recent figure for the share of motor-vehicle traffic in inland transport as a whole varies from country to country—from 14.8 per cent in Chile to 61.5 per cent in Brazil and as much as 72.3 per cent in Costa Rica—in every case it is higher than in 1950. Although this expansion of motor-vehicle traffic was in some cases effected at the expense of shipping, it was usually railway traffic that suffered. Not only did the railways' percentage share in total transport undergo the sharpest reductions, but in some cases the number of ton/kilometres hauled declined in absolute terms.

The growth of motor-vehicle passenger traffic during the same period was also impressive. The incomplete data in table 71, limited by statistical difficulties to only four Latin American countries, underline the contrast between this expansion and the stagnation or very slow upward trend observable in railway passenger traffic, which appears in an even less favourable light, as regards the number of passengers carried, in view of the fact that average lengths of journey have increased in the meantime.

As for external transport, this was represented mainly—and in some cases exclusively—by maritime and river traffic, which is still the principal medium whereby Latin America's international trade is conducted (see table 72). On an average, waterborne traffic carries 97 per cent of the exports and imports of ten of the major Latin American countries: Argentina, Brazil, Chile, Colombia,

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[1] The ECLA secretariat and the Organization of American States are preparing a joint study, the aim of which is to examine these factors in the necessary detail. The study will be completed within the next few months.

Ecuador, Mexico, Paraguay, Peru, Uruguay and Venezuela. In the nine South American countries the corresponding proportion varies between 89 and 100 per cent, while Mexico uses maritime transport for only 52 per cent of its foreign trade, thanks to the long land frontier joining it up with its principal buying and selling market. The high percentage of foreign trade cargo carried by water is not to be wondered at, since the sea route is virtually the only link between South America and the leading world centres; most of the region's more important producer and consumer centres are on or near the coast; such little intra-regional trade as exists is peripheral; distances are enormous on so vast a continent; land communications are impeded by formidable natural barriers, and international railroads and highways are few and far between.

Table 70. Latin America: Evolution of freight traffic, according to means of inland transport, in selected countries
(*Tons per km*)

Country	*Year*	*Indexes*				*Percentage composition*		
		Railways	*Motor vehicles*	*Shipping*	*Total*	*Railways*	*Motor vehicles*	*Shipping*
		(I)	*(II)*	*(III)*	*(IV)*	*(V)*	*(VI)*	*(VII)*
Argentina . .	1950	100	100	100	100	51.1	27.3	21.6
	1960	94	160	162	127	38.0	34.5	27.5
Brazil . .	1950	100	100	100	100	28.6	41.6	29.8
	1960	153	365	172	248	17.7	61.5	20.8
Chile . . .	1954	100	100	100	100	...	...	...
	1959	95	148	187	145	27.6	14.8	57.6
Colombia . .	1951	100	100	100	100	21.2	43.6	35.2
	1960	140	201	130	163	18.2	53.9	27.9
Costa Rica . .	1950	100	100	100	100	42.8	51.4	5.8
	1958	160	381	109	270	25.4	72.3	2.3
Mexico . .	1950	100	100	...	100	82.0	18.0	...
	1960	149	607	...	232	52.8	47.2	...

SOURCES:

Argentina: Railways, Empresa de Ferrocarriles del Estado Argentino; shipping and motor vehicles, 1950, ECLA (E/CN.12/491/Add.1); shipping, 1960, estimate; motor vehicles, 1960, estimate by Dr. J. P. Baumgartner, IBRD mission expert.
Railways: covers only revenue-earning traffic.
Shipping: covers minor coastwise traffic, inland waterway traffic, and traffic in the estuary of the River Plate.

Brazil: Consultec, *O trasporte rodoviario no Brasil*, 1962.
Shipping: covers only inter-state coastwise traffic in Brazil.

Chile: CORFO, *Programa de transportes* 1961–1970, 1962.
Motor vehicles: covers only inter-urban transport.

Colombia: IBRD Mission, *Estudio del transporte nacional*, 1962.
Motor vehicles: covers only inter-urban traffic.
Shipping: covers inland waterway and coastwise traffic.

Costa Rica: University of Costa Rica, *El desarrollo económico de Costa Rica, Estudio del sector transportes, 1962.*

Mexico: Fondo de Cultura Económica, *Ferrocarriles*, 1959. The indexes for motor vehicles in 1960 are based on estimates.

It is in the light of these essential characteristics and trends that the most recent changes with regard to the expansion and composition of traffic, as described below, can be assessed.

1. RAILWAY GOODS TRAFFIC

During the period 1960–63, to judge from the data available for eight countries of the region—Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru and Uruguay—the trend towards stagnation in Latin America's railway traffic became more marked, largely on account of a substantial reduction in rail traffic in Argentina; and, accordingly, the effects of the slow growth rate of rail transport of goods in the fifties, when the total load carried had increased by barely 9 per cent, were yet further aggravated.

The consequences of so small an expansion in the volume of freight were only partly offset by an increase in the average length of haul—from 283 kilometres in 1950 to 315 kilometres in 1960—which was reflected in a 21-per-cent rise in the number of ton/kilometres in the course of the decade. There are signs that this trend in the direction of a longer average haul has continued in recent years, as a result of competition from motor-vehicle traffic over short and medium distances (see table 73). In 1960, total railway traffic throughout South America constituted (in terms of ton/kilometres) slightly less than 1 per cent of world railway traffic, although the length of the South American network was about 8 per cent of that of world railway systems as a whole.

The main reasons for the over-all stagnation of Latin America's rail traffic are the technical, operational and commercial defects of the railways, which preclude effective competition with motor-vehicle traffic. The latter is capturing not only new traffic flows, but also those which have been traditionally carried by the railways; it even competes for long-distance traffic, since roads are being built parallel to the railway tracks. To make matters worse, the railways are losing the merchandise for which transport rates are highest, and are left with the least profitable items.

Table 71. Latin America: Evolution of inter-urban passenger traffic, according to means of transport, in selected countries
(*Millions of passenger-km*)

Country and year	*Motor vehicles*	*Railways*	*Aircraft*[a]
Argentina			
1948	7,400	5,600	115
1953	8,500	5,900	156
1960	12,400	6,800	426
Brazil			
1950	1,596	5,507	...
1953	4,100	6,496	1,279
1960	9,174	7,180	2,280
Chile			
1948	...	1,880	50
1953	24[b,d]	2,076	80
1960	27[c,d]	1,900	268
Costa Rica			
1946	144	47	...
1953	228	51	...
1958	316	66	...

SOURCES: Motor vehicle traffic: estimates from various sources.
Railway traffic: official railway statistics.
Air traffic: United Nations, *Statistical Yearbook*, various issues.

[a] Internal traffic only.

[b] 1954.

[c] 1959.

[d] Millions of passengers.

The over-all trends described above vary from country to country. The heaviest traffic loss was sustained by the Argentine railway network, the number of tons carried in 1963 being barely 50 per cent of the 1950 figure. The traffic handled by the Brazilian railway system—which still carries the biggest volume of freight, i.e., some 45 million tons per year—showed a substantial increase in the fifties, but this upward trend has been flattening out, with only slight fluctuations. Colombia's railway traffic dropped sharply, despite the inauguration of the Ferrocarril del Atlántico in 1961, which raised the average length of haul and therefore the number of ton/kilometres. In Chile, a reduction of traffic on the southern network was offset by the increase in the transport of iron ore over the northern network. However, the distances involved were short, and as a result the average length of haul declined, in contrast with the situation in most of the other countries. Railway freight traffic in Mexico followed the same pattern as in Brazil. In Peru, ore transport increased but general goods traffic decreased, especially on the State-owned railways, so that the total load carried remained virtually unchanged. In Uruguay both the volume of freight and the average length of haul declined.

2. RAILWAY PASSENGER TRAFFIC

Broadly speaking, inter-urban passenger traffic on the railways followed much the same pattern as goods traffic. After rising sharply during the Second World War and in the early post-war period, it developed still less favourably than railway freight traffic in the fifties. Total traffic increased, but this was due solely to the expansion of suburban traffic in Buenos Aires, Rio de Janeiro and São Paulo. Furthermore, the total number of passengers carried by the Latin American railways in both general and intra-urban traffic dropped by 3 per cent, and it was only because of a gradual increase in the average length of journey that the number of passenger/kilometres rose by 11 per cent.

Table 72. Latin America: Foreign trade served by maritime and inland waterway traffic, 1962
(*Millions of tons*)

Country	*Exports*		*Imports*		*Foreign trade*[a]	
	By maritime and inland waterway transport	*Percentage of total*	*By maritime and inland waterway transport*	*Percentage of total*	*By maritime and inland waterway transport*	*Percentage of total*
Argentina	11.7	98	7.3	96	19.0	97
Brazil	12.1	98	16.7	99	28.8	99
Chile	9.3	100	2.8	97	12.1	99
Colombia	4.8	89	1.2	91	6.0	89
Ecuador	1.1	99	0.5	99	1.6	99
Mexico	6.6	60	0.9	27	7.5	52
Paraguay	0.3	97	0.2	86	0.5	92
Peru	8.7	100	2.1	99	10.8	100
Uruguay	0.3	99	2.3	96	2.6	96
Venezuela	171.2	100	2.3	100	173.5	100
TOTAL	226.1	98	36.3	92	262.4	97

SOURCE: Argentina: Consejo Nacional de la Marina Mercante; Chile: Subsecretaría de Transportes; Ecuador: *Boletín del Banco Central del Ecuador, 1962*; other countries: foreign trade yearbooks.

[a] The reciprocal trade of the Latin American countries considered is duplicated because it is included as both exports and imports. If this duplication is eliminated, total trade is reduced from 262.4 million tons to 249.0 million.

This pattern has remained virtually unchanged since 1960, at least in respect of the eight countries mentioned earlier. In Argentina, the decline was particularly sharp in 1962, and was only partly offset by the increase in the average length of journey (see table 74). In Brazil, on the other hand, both the number of passengers carried and the number of passenger/kilometres increased, although the average length of journey diminished. The number of passengers was lower in both Colombia and Peru, but the number of passenger/kilometres remained the same, or rose slightly because the average length of journey was greater. In Ecuador and Mexico, on the other hand, the position was reversed: the number of passengers carried was larger, and the average length of journey decreased. The number of passengers carried remained stable in Chile, ranging between 21 million and 22 million, and in Uruguay it began to increase after a drop in 1961. The average length of journey was higher in both these countries.

Table 73. Latin America: Goods traffic in eight railway systems
(*Millions of tons and ton-km; length of haul in km*)

	Argentina	*Brazil*	*Chile*	*Colombia*	*Ecuador*	*Mexico*	*Peru*	*Uruguay*
1950								
Tonnage . . .	32.8	34.9	13.9	4.6	0.5	22.9	3.6	1.4
Ton-km . . .	16,120	8,267	2,161	558	101	9,400	403	470
Average length of haul	491	237	155	121	202	410	112	336
1960								
Tonnage . . .	25.9	46.1	14.1	5.4	0.6	32.2	4.2	1.5
Ton-km . . .	15,158	12,820	2,025	768	103	14,004	529	399
Average length of haul	585	278	144	142	172	435	126	266
1961								
Tonnage . . .	22.0	43.8	13.9	5.2	0.5	30.6	4.2	1.3
Ton-km . . .	14,014	12,228	1,953	775	118	13,524	541	320
Average length of haul	637	279	141	149	236	442	129	246
1962								
Tonnage . . .	17.2	45.4	15.8	4.5	0.5	30.6	3.9	1.2
Ton-km . . .	10,913	12,757	2,192	918	124	13,521	534	281
Average length of haul	634	281	139	204	248	442	137	234
1963[a]								
Tonnage . . .	16.5	...	...	3.7	0.6	...	4.3	0.8
Ton-km . . .	10,410	...	...	891	...	...	511	196
Average length of haul	631	...	...	241	...	...	119	245

SOURCE: Official railway statistics.

[a] Estimates based on incomplete data.

Table 74. Latin America: General railway passenger traffic in eight countries
(*Millions of passengers and passenger-km; length of journey in km*)

	Argentina[a]	*Brazil*[a]	*Chile*	*Colombia*	*Ecuador*	*Mexico*	*Peru*	*Uruguay*
1950								
Passengers . .	55.2	92.4	24.7	15.2	1.9	32.4	5.8	9.2
Passenger-km . .	6,835	10,093	1,956	743	121	3,025	241	470
Average length of journey	124	109	79	49	64	93	42	51
1960								
Passengers . .	67.8	88.5	22.9	9.8	1.3	32.6	5.1	10.0
Passenger-km . .	6,938	7,180	1,900	598	82	4,128	282	535
Average length of journey	102	81	83	61	63	127	55	53
1961								
Passengers . .	63.0	99.9	21.3	9.5	1.3	33.6	4.7	8.6
Passenger-km . .	6,620	7,581	1,785	616	80	4,288	275	494
Average length of journey	105	76	84	65	62	128	59	57
1962								
Passengers . .	41.4	98.9	22.4	9.0	1.8	34.6	4.4	9.8
Passenger-km . .	5,180	7,393	1,919	623	84	3,770	275	608
Average length of journey	125	75	86	69	47	109	63	62
1963								
Passengers . .	43.3	...	...	8.6	2.4	...	4.2	10.4
Passenger-km . .	5,350	...	...	627	76	...	279	631
Average length of journey	124	...	...	73	32	...	66	61

SOURCE: Statistics of the railways concerned.

[a] The 1962 and 1963 figures for Argentina and Brazil are provisional. The figures for 1963 were estimated on the basis of several months.

The generally unfavourable changes described above reflect, on the one hand, the growing competition from motor-vehicle and air transport, and, on the other, the defects of the railway system itself, in terms not only of deterioration and obsolescence of rolling-stock and track, but also of operational methods, passenger tariff policy and traffic promotion in general.

The characteristics of suburban traffic were quite different from those of inter-urban transport, particularly in Argentina and Brazil.[2] In Argentina, the number of passengers carried, after having reached far higher levels than in 1950, dropped sharply in 1962 and 1963. The average length of journey slightly exceeded the 1950 figure (see table 75). Suburban traffic in Rio de Janeiro and São Paulo increased considerably in the fifties, and has continued to do so since, in respect of the number of passengers carried, the number of passenger/kilometres and the average length of journey. Clearly, then, suburban traffic is in a stage of vigorous expansion; and, what is more, this trend is likely to continue as a result of the re-planning of the Rio de Janeiro suburbs and the urbanization projects in São Paulo.

Table 75. Argentina and Brazil: Suburban railway passenger traffic

(Millions of passengers and passenger-km; length of journey in km)

	1950	*1960*	*1961*[a]	*1962*[a]	*1963*[a]
Argentina					
Passengers	435	536	527	410	416
Passenger-km	6,269	8,747	8,540	6,640	6,740
Average length of journey	14.4	16.3	16.2	16.2	16.2
Brazil					
Passengers	250	332	357	389	...
Passenger-km	4,240	8,215	9,274	10,503	...
Average length of journey	17	25	26	27	...

SOURCE: Railway statistics.

[a] The 1961 and 1962 figures are provisional, and those for 1963 are estimates.

3. EVOLUTION OF MOTOR-VEHICLE TRAFFIC

In contrast with the stagnation or very slow growth of railway traffic, the early post-war years were marked by a spectacular expansion of motor-vehicle traffic. Unfortunately, neither adequate statistical data nor even mere estimates are available to permit an assessment of the magnitude of the changes that have occurred during the past few years. If the rise in the number of motor vehicles in Latin America—with the necessary reservations in relation to capacity, annual mileage and utilization coefficient—is taken as a yardstick, it must be concluded that the growth rate of motor-vehicle transport has slowed down considerably since 1960. In fact, the data available for fourteen Latin American countries indicate that in 1960–63 the rate of increase of the motor-vehicle inventory in ten of these countries was below (in some cases far below) the average for the period 1950–60. The only exceptions are Argentina—probably because of the expansion of its domestic production, and the import restrictions imposed in earlier periods—El Salvador, Guatemala and Panama (see table 88 below for detailed figures).

4. INLAND WATERWAY AND COASTAL TRAFFIC

The expansion in inland waterway and coastal freight traffic which was already taking place in the fifties has continued with increased vigour. Certain handicaps, deriving mainly from the considerable age of most of the vessels used, and from the inadequacy of sea and river port facilities, have been overcome, and advantage has thus been taken of the fact that the countries with the heaviest traffic operate mainly on routes not served by any railway system.

This expansion, however, was registered in respect of bulk cargo, raw materials and petroleum, particularly the last-named, while general freight traffic, in which there is stronger competition from railway and motor-vehicle transport and which suffers from the handicaps mentioned above, increased very slowly or not at all.

The broad characteristics just described can be better appreciated in the light of more specific data on some Latin American countries. In Argentina, the 42-per-cent increase in total coastwise traffic between 1960 and 1962 was largely attributable to the transport of liquid fuel, and in a lesser degree, to the 376-per-cent increment in bulk freight (resulting chiefly from the additional requirements of the steel industry, as regards ores and coal). On the other hand, transport of general cargo dropped by 12 per cent in the case of coastal traffic and by 3 per cent in that of inland waterway transport. In Brazil, coastal traffic—which includes inter-State maritime and river transport—increased from 7,650,000 tons in 1960 to 9,454,000 tons in 1962. This increase was proportionally higher with respect to what are known as "crude and processed raw materials" (chiefly liquid fuels), since the rest of the traffic (mainly in foodstuffs and beverages) decreased in absolute terms. In Colombia, river traffic, chiefly on the Rio Magdalena, rose by some 20 per cent between 1960 and 1963, despite competition from a new railway (the Ferrocarril del Atlántico); in contrast, coastal traffic declined sharply (from 397,000 tons to 259,000 between 1960 and 1962). Lastly, there were also substantial increases in Chile between 1960 and 1963—amounting to 70 per cent for coastal traffic—attributable mainly to the transport of liquid fuel, and bulk freight consisting of coal and ores, since there was little or no change in the movement of general cargo.

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[2] In the other countries mentioned, suburban railway passenger traffic is not very significant (except in Chile and Uruguay, up to a point) and is therefore not classified separately in the relevant statistics.

5. EXTERNAL MARITIME TRANSPORT

With few exceptions, shipping is the principal means of transport used for Latin America's import and export freight, and its evolution is therefore closely related to the vicissitudes of the region's foreign trade. In the five-year period 1957–61, the South American and Mexican trade cargo carried by maritime and inland waterway transport amounted to an annual average of 229 million tons, and in 1962 rose a further 9 per cent to 249 million tons. Of this figure, 13.5 million represented intra-regional trade (a 9 per cent drop), 212.6 million, exports to third countries (an increase of 14 per cent) and 23 million, imports from third countries (a reduction of 15 per cent).

Table 76. South America and Mexico: External maritime traffic, by type of cargo, 1961 and 1962

(*Millions of tons*)

Traffic	*Liquid fuels*		*Dry cargo*		*Total*		*Percentage*
	1961	*1962*	*1961*	*1962*	*1961*	*1962*	
Reciprocal trade	9.2	9.3	2.9	4.2	12.1	13.5	5.4
Exports	143.5	153.2	53.3	59.4	196.8	212.6	85.4
Imports	9.6	7.1	16.2	15.8	25.8	22.9	9.2
TOTAL TRADE	162.3	169.6	72.4	79.4	234.7	249.0	100.0
Percentage of total	69	68	31	32	100	100	

SOURCE: Prepared on the basis of data from the 1961 and 1962 foreign trade yearbooks of the countries concerned, and information from the Instituto de Estudios de la Marina Mercante Argentina (IEMMA), the Subsecretaría de Transportes de Chile, and ECLA correspondents.

A breakdown of the total volume of freight carried in Latin America's foreign trade shows that in 1962 liquid fuels accounted for 68 per cent and dry cargo for 32 per cent, as compared with 69 per cent and 31 per cent respectively in 1961. In the region's total trade, the share of liquid fuels has been decreasing since 1952, when it amounted to 78 per cent; but it is still fairly high, chiefly as a result of Venezuela's petroleum exports, which have been increasing year by year and amounted in 1962 to 150 million tons out of a total of 153 million for Latin America as a whole. As regards intra-regional trade, the volume of liquid fuels was maintained above 9 million tons, but their share in the total declined from 76 per cent to 69 per cent, while the volume of dry cargo rose from 2.9 million tons to 4.2 million, or, in other words, from 24 per cent to 31 per cent (see table 76).

Over half the dry cargo exported was in the form of bulk freight, i.e., full loads shipped unpacked, usually in tramp steamers or company-owned vessels or in ships chartered on a long-term basis by the industrial combines concerned. The main bulk items carried in Latin American traffic are iron ore (31 million tons a year), grains, coal, and crude or processed fertilizer. The rest consists almost entirely of general cargo, i.e., miscellaneous goods, generally of higher unit value, and forming the basic load on which all regular shipping lines depend. A very small proportion—about 1 per cent of the total—is represented by refrigerated cargo, chiefly meat and fresh fruit.

The transport of this tonnage entailed considerable expenditure in maritime freight, which amounted in 1962 to some 2,000 million dollars for Latin America as a whole. This figure exceeds the value of any of Latin America's import or export items, except Venezuelan petroleum.[3]

While full information on freight charges and prices for Latin American commodities is not available, the average incidence of the former is roughly estimated at 10 or 11 per cent of the f.o.b. value in the case of imports and 13 to 15 per cent in that of exports. However, these figures vary considerably, according to the commodity concerned and the distance to be covered, and may range from some 5 per cent of the value of imports of expensive machinery and equipment, to 20 per cent in the case of steel and similar products. The variations registered for exports are even wider: 1.5 per cent for Chilean and Peruvian copper shipped to the United States, 5 to 10 per cent for Brazilian coffee (depending upon its destination), over 15 per cent for Argentine grain, and 30 to 40 per cent for some raw materials like iron ore, crude petroleum and nitrate. With regard to fluctuations in freight costs, tramp steamer rates are usually very high, particularly during periods of emergency, and those charged by regular shipping lines are lower (10 to 15 per cent a year as a maximum in exceptional cases).

Since most of this transport is effected by non-Latin American vessels, the incidence of freight costs on the region's balance of payments is also very heavy. According to International Monetary Fund (IMF) data, the deficits in 1961 amounted to 657 million dollars for Latin America as a whole, of which 527 million were represented by freight, 67 million by insurance on merchandise and 64 million by other transport items (including a heterogeneous mixture of credits and debits, chiefly payments and receipts in respect of passages, time charters and miscellaneous expenditure while in port, particularly on fuel and other supplies, loading and unloading, harbour dues and ship maintenance).[4]

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[3] This estimate also includes the cost of maritime transport by company-owned vessels and ships chartered on a long-term basis by petroleum and other industrial combines. In order to evaluate the total incidence of transport costs on the region's foreign trade, overland transport costs in the countries of origin and destination, which are often higher than maritime freight charges, would have to be added.

Table 77. Latin America[a]: Share of national fleets in the transport of its foreign trade cargo, 1962

(*Millions of tons*)

Country	*Exports*		*Imports*		*Total volume*	*Percentage of total*
	Volume	*Percentage*	*Volume*	*Percentage*		
Argentina	1.3	11	2.1	29	3.4	18
Brazil	0.8	7	6.8	41	7.6	27
Chile	1.2[b]	13	0.6[b]	23	1.8[b]	15
Colombia	0.3[c]	5	0.6[c]	44	0.9[c]	13
Ecuador	0.1	6	0.0	8	0.1	6
Mexico	0.2	3	0.1	9	0.3	4
Paraguay	0.1[d]	35	0.0[d]	19	0.1	29
Peru	0.2	3	0.2	8	0.4	4
Uruguay	0.0	3	0.5	23	0.5	21
Venezuela[e]	...	...	0.4	17	0.4	...
	4.2	2	11.3	31	15.5	6

Source: 1962 foreign trade yearbooks. Ecuador, *Boletín del Banco Central, 1962*; Argentina, Consejo Nacional de la Marina Mercante; Chile, Subsecretaría de Transportes.

[a] Includes only Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay and Venezuela.

[b] Includes hired vessels.

[c] Covers only the Flota Mercante Grancolombiana, S.A., the main company in Colombia.

[d] Estimate.

[e] Covers only the Compañia Anónima Venezolana de Navegación, the main Venezuelan shipping enterprise handling dry cargo, which also carried 14,000 tons of exports. It was not possible to estimate the share of vessels sailing under the Venezuelan flag in the traffic in liquid fuels.

The 657-million-dollar deficit on the transport account represents about one third of the over-all debit balance in respect of service transactions. Apart from transport, these include such items as travel and the tourist industry, investment earnings and government transactions, as well as other services of minor importance.

As for the share of the region's own merchant fleets in the transport of its foreign trade cargo, estimates show that in 1962 ships sailing under national flags—whether Latin American-owned, or chartered and operated by enterprises in the region—carried about 15.5 million tons, or barely 6 per cent of the volume of Latin America's seaborne external trade. The proportion is much higher for import than for export traffic: 31 as compared with only 2 per cent (see table 77). There are several reasons for the existence of this situation, including the inadequate capacity of Latin American shipping; the predominance of liquid fuel, which is usually transported in tankers controlled by the major international oil companies; the substantial volume of bulk cargo carried by company-owned vessels or tramp steamers, often under flags of convenience; and the influence on the contracting of freight exerted by the Latin American accounting practice of reckoning exports on an f.o.b. basis and imports in c.i.f. terms. On the other hand, the proportion of foreign trade freight earnings (expressed in percentage terms) corresponding to Latin American shipping is nearly twice the latter's percentage share in the volume of goods carried, chiefly because the Latin American fleets primarily handle general cargo, for which freight charges are higher than for liquid fuels and bulk cargo (see table 78).

Table 78. Latin America: Estimated share in maritime transport of its foreign trade cargo, 1962

(*Millions of dollars*)

Country	*Total cargo*	*Cargo carried in country's own bottoms*	*Percentage carried in country's own bottoms*
Argentina	277.7	58.9	21
Brazil[a]	400.0[b]	69.0	17
Chile	121.1	24.5	20
Colombia	80.0[b]	25.1[c]	33
Ecuador	18.0[b]	6.4[c]	35
Mexico	100.0[b]	10.4[d]	10
Paraguay	11.0[b]	3.8[b]	35
Peru	110.0[b]	3.5[b]	3
Uruguay	40.0[b]	3.2[b]	8
Venezuela	850.0[b]	15.3[e]	2
	2,007.8	220.1	11

Source: Figures prepared on the basis of information from the Instituto de Estudios de la Marina Mercante Argentina, the Subsecretaría de Transportes de Chile, and the reports of the main shipping companies, together with estimates calculated on the basis of the imports and exports of each country.

[a] 1961.

[b] Estimate.

[c] Covers only the Flota Mercante Grancolombiana, S.A., the main company providing external transport.

[d] Covers only Transportación Marítima Mexicana, S.A., the main company providing external transport.

[e] Covers only the Compañía Anónima Venezolana de Navegación, the main shipping company handling dry cargo; it was not possible to estimate the share of vessels sailing under the Venezuelan flag in the traffic in liquid fuels.

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[4] It should be pointed out that the balance-of-payments data also cover other transport media, particularly air freight, but the incidence of these figures is slight.

Table 79. Inter-South American maritime trade, by type of cargo, 1962
(*Thousands of tons*)

Exporting countries	*Importing countries*									
	Argentina	*Brazil*	*Chile*	*Colombia*	*Ecuador*	*Paraguay*	*Peru*	*Uruguay*	*Venezuela*	*Total*
Argentina										
Liquid fuels		116				3		95		214
Bulk cargo		689					308			997
Dry cargo		18	122	4	0.0	66	1	68	24	303
Refrigerated cargo		150	10				8		20	188
Total		973	132	4	0.0	69	317	163	44	1,702
Brazil										
Liquid fuels						2				2
Bulk cargo	240									240
Dry cargo	497		22	0.0	0.0	8	2	82	1	612
Total	737		22	0.0	0.0	10	2	82	1	854
Chile										
Bulk cargo	172									172
Dry cargo	112	82		2	3	0.0	26	6	8	239
Refrigerated cargo					1		3			4
Total	284	82		2	4	0.0	29	6	8	415
Colombia										
Liquid fuels			17				218			235
Dry cargo	3	0.0	6		2		81	0.0	15	107
Total	3	0.0	23		2		299	0.0	15	342
Ecuador										
Dry cargo	24	0.0		5			5	0.0	0.0	34
Refrigerated cargo			38				10			48
Total	24	0.0	38	5			15	0.0	0.0	82
Paraguay										
Dry cargo	200	9	0.0					17		226
Total	200	9	0.0					17		226
Peru										
Liquid fuels	27	122	6							155
Bulk cargo	304									304
Dry cargo	19	38	146	5	5			7	9	229
Total	350	160	152	5	5			7	9	688
Uruguay										
Dry cargo	239	10	1			2				252
Total	239	10	1			2				252
Venezuela										
Liquid fuels	1,553	5,419	621	13	191	33	167	692		8,689
Dry cargo	72	28	5	6			5			116
Total	1,625	5,447	626	19	191	33	172	692		8,805
Total										
Liquid fuels	1,580	5,657	644	13	191	38	385	787	—	9,295
Bulk cargo	716	689	—	—	—	—	308	—	—	1,713
Dry cargo	1,166	185	302	22	10	76	120	180	57	2,118
Refrigerated cargo		150	48	—	1	—	21	—	20	240
	3,462	6,681	994	35	202	114	834	967	77	13,366

Sources: 1962 foreign trade yearbooks; official statistical bulletins of Mexico (January 1962) and Chile (1962); *Boletín del Banco Central*, Ecuador; IEMMA, Argentina, 1962.

With regard to intra-regional, or, more specifically, inter-South American trade,[5] in which again maritime and inland waterway transport is the principal means of conveyance used, fluctuations in the amount of freight carried have been fairly sharp in the past three years; in 1961, the annual average of 14.8 million tons registered over the whole period 1957–61 dropped to 12.1 million, after which a partial recovery in 1962 increased the volume to 13.4 million. These figures are in any event very much higher than in 1952, when only 7.9 million tons were transported.

At the same time, the composition of inter-South American traffic changed appreciably, as shown by the following figures:

Type of cargo	*1952*	*1960*	*1961*	*1962*
		(millions of tons)		
Liquid fuel	6.3	10.7	9.2	9.3
Bulk cargo	0.4	2.3	0.9	1.7
General cargo	1.0	1.9	1.9	2.2
Refrigerated cargo	0.2	0.1	0.1	0.2
Total reciprocal trade	7.9	15.0	12.1	13.4

Table 79 provides more detailed data on intra-regional traffic in 1962.

Lack of information makes it difficult to give specific figures on the share of South American shipping in the transport of intra-regional trade cargo, except for Argentina and Chile. During the year 1962, Argentina carried 42 per cent of the volume of merchandise traded with other South American countries in its own bottoms (44 per cent of its imports and 40 per cent of its exports, the corresponding proportions in the case of trade with Brazil—with which Argentine ship owners are primarily concerned—being 48 and 52 per cent, respectively). Chile's merchant marine transported 26 per cent of the freight involved in its intra-South American trade, 10 per cent of its imports and 62 per cent of its exports; but the figures are far higher in relation to its trade with Argentina (98 per cent and 61 per cent, respectively) and with Brazil (73 per cent and 76 per cent, respectively). In any event, South American shipping plays a much larger part in the area's intra-zonal traffic than in its total external trade, because the existing protectionist measures are more effective in inter-Latin American transport than in traffic with countries outside the region.

Lastly, it should be pointed out that attempts to increase the share of Latin American merchant fleets in the region's external trade have been strengthened by the action taken within ALALC and by the establishment of the Latin American Association of Shipowners (Asociación Latinoamericana de Armadores—ALAMAR) in July 1963. In April 1964, ALALC's Advisory Committee on Transport adopted a draft general agreement on maritime, river and lake transport. The following are some of its main provisions: in trade between the Contracting Parties, waterborne cargoes shall be reserved to the ships of the said Contracting Parties under the conditions set forth in the agreement; each Contracting Party may reserve to itself a quota of up to 40 per cent of the bilateral transport of freight carried in Area trade; cargo not subject to bilateral regulations, and any portion of the bilateral quotas not transported by one of the Contracting Parties, shall be reserved to regular national shipping lines of the Contracting Parties plying between their own country and the ports of countries in the Area; and a proportion of up to 10 per cent of the total transport of Area trade cargo shall be released for regular shipping lines operating under the flags of the Contracting Parties, and for regular shipping lines operating under other flags, which, in the course of their normal routes, provide direct transport between their own country and the countries of the Area and primarily serve the reciprocal external trade of the countries concerned. Other provisions relate to transport conditions and to the definition of the nationality of ships. The draft agreement does not cover the transport of petroleum and petroleum products, which will continue to be subject to the legislation of each Contracting Party. The agreement will have to be ratified by five countries before it can enter into force, a requirement which is expected to be met within the near future.

It is worth noting that the draft agreement follows a criterion less severe than absolute bilateralism, in reserving 40 per cent to the ships of each country in which trade is generated; this makes it possible for shipping lines belonging to countries in the Area and maintaining long-range services to take on cargo at intermediate ports, so that the rigidity and waste of hold space occasioned by the fifty-fifty system is avoided. At the same time, shipping companies outside the Area that operate regular services between their own country and the members of ALALC are given the opportunity of retaining a share in the traffic, and a healthy and necessary competition is thus promoted.

B. EVOLUTION OF TRANSPORT INFRASTRUCTURE AND EQUIPMENT

The principal characteristics alluded to in connexion with the evolution of traffic are at the same time the cause and the effect of the quantitative and qualitative changes which have occurred in respect of the various types of transport infrastructure and equipment. For example, the sharp drop in rail traffic, at least in relative terms, is attributable partly to a decrease in the length of the railway networks, but above all to the technical deterioration of the track, to the increasing obsolescence of rolling-stock, and to various operational deficiencies. These shortcomings, in turn, are aggravated by economic and financial problems deriving from this very reduction of railway traffic. On the other hand, the increase in motor-vehicle transport, while promoted by road construction and improvement projects, at the same time creates a favourable climate for further expansion and for the steady growth of the motor-vehicle inventory.

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[5] In the analysis of intra-regional traffic, attention has been concentrated on inter-South American trade, i.e., the reciprocal trade of Argentina, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay and Venezuela, partly for the sake of comparability with earlier periods, and partly because Mexico's share in inter-Latin American imports and exports is insignificant (in 1962, Mexico exported 70,000 tons to the region and imported 42,000 from it).

1. RAILWAY NETWORKS AND TRACK

The existing features and problems of Latin America's railway networks are still largely determined by the conditions under which they were originally built. Begun as a rule in or after about 1850, financed almost invariably with foreign capital, and intended essentially for the exportation of raw materials and primary commodities, both agricultural and mineral, they were developed separately and inconsistently, without over-all planning and quite often with very low technical specifications. The underlying motives were twofold: to make a quick profit and to overcome, with a minimum of investment, the geographical difficulties occasioned by the existence of mountain ranges. Only in some parts of Latin America have the railway networks become partly integrated over the years. Notwithstanding their deficiencies, they are in great measure responsible for the present geo-economic structure of the Latin American countries.

After a rapid increase in the laying of new track at the turn of the century, the expansion slowed down somewhat, and with the outbreak of the Second World War virtually came to a stop. From then onwards, the total length of Latin America's railway networks increased by less than 5 per cent in fifteen years, and even decreased in some countries, with the result that in 1960 it amounted to about 137,647 kilometres.

The trend described has become more marked in the past few years. In fact, between 1960 and 1963 the aggregate length of the railway networks of eleven countries —which together represented more than 93 per cent of the Latin American total—diminished by about 4 per cent (see table 80), mainly because of the reductions effected in Argentina (3,679 kilometres). Actually the decrease was still greater, since the figure for Brazil includes only the suppression of those lines on which removal of the track had begun, although traffic had already been suspended over a length of some 5,000 kilometres.

These data indicate that the general trend is towards the closing down of railway lines rather than the construction of new ones. The only important lines built since 1955 have been the Ferrocarril del Atlántico in Colombia and the Chihuahua–Pacífico railway in Mexico (both already in operation), together with the major southern trunk line (São Paulo–Porto Alegre) and the connexion to Brasilia at present under construction in Brazil; whereas the next few years are likely to witness an intensification of the policy of closing down anti-economic branch lines, judging from the recommendations made by international agencies and the decisions embodied in national development plans which, if carried out, would mean that about 24,000 kilometres of track would be completely eliminated.

As to the technical condition of the infrastructures, their age and obsolescence are noteworthy in all the Latin American countries, though in varying degrees. While the technical features of the track have improved, up to a point, in some countries, the condition of the networks as a whole is poor, and can even be described as worse than it was in 1938. The lines are virtually all (97 per cent) of the single-track type; they generally consist of light rails that are old and worn, and on many of them there is no ballast and the sleepers are defective. With few exceptions, the principle followed is still the technically out-of-date norm of track rigidity, even in the new sections, and the modern flexible-track technique is seldom applied. The variety of gauges, of which ten are in use in Latin America, is a universal problem, except in Bolivia, Colombia and Uruguay. Electrified lines are scarce (less than 3 per cent of the total length), and all operate on direct current at voltages varying from 600 in the suburbs of Buenos Aires to 3,000 in Brazil and Chile.[6]

Table 80. Latin America: Evolution of railway networks
(*Kilometres*)

Country	*1950*	*1960*	*1963*
Argentina	42,865	43,923	40,244
Bolivia	3,081	3,470	3,470[a]
Brazil	36,681	38,339	37,553[b]
Chile	8,497	8,685	8.640
Colombia	3,060	3,562	3,435
Ecuador	1,124	1,152	1,154
Mexico	22,809	23,369	23,228
Paraguay	449	449	449[a]
Peru	3,097	2,934	2,886
Uruguay	2,991	2,982	2,982
Venezuela	997	474	474[a]
TOTAL	125,701	129,389	124,565

SOURCE: Railway statistics of the country concerned.

[a] 1960 data.

[b] 1962 data.

Faced with this situation, a number of countries have in recent years launched major programmes for the replacement and modernization of their railway track, together with their rolling-stock and other installations. This is being done in Colombia, with the assistance of the International Bank for Reconstruction and Development (IBRD); in Brazil, where the first step was the creation of the Federal railway network in 1957; and in Chile, under the ten-year development plan (Plan Decenal de Desarrollo). In other countries—for example, Argentina, Bolivia, Peru and Uruguay—while work has not actually been started, plans have been drawn up and some purchases have been made to meet emergency requirements in the weakest sections or points.

2. ROADS

The development of highway networks contrasts sharply with that of the railways. The first phase was initiated in the thirties, and was followed by rapid expansion in the post-war period, when all the Latin American countries increased their highway mileage considerably,

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[6] Completion of the electrification projects in the Santiago–Chillán section in Chile, the Rio de Janeiro–São Paulo and Rio de Janeiro–Belo Horizonte sections in Brazil, and the trans-Andean railway in Argentina (with single-phase current) will not radically affect the percentage figure given.

Table 81. Latin America: Evolution of road networks
(*Kilometres*)

Country—Year	*Paved roads*[a]	*Improved and low-cost paved roads*[b]	*Earth roads*[c]	*Total network of all-weather roads*
Argentina				
1950 .	3,980	21,534	46,000[d]	71,500[d]
1960 .	6,200	30,900[d]	39,000[d]	76,100[d]
1962 .	6,225	32,850[d]	42,000[d]	81,100[d]
Bolivia				
1960 .	536	2,180	3,035	5,751
1962 .	571	3,650	...	...
Brazil				
1952 .	...	...	...	42,000[d]
1960 .	13,500	... (60,000[d,e]) ...		73,500[d]
1962 .	16,441	... (60,000[d,e]) ...		76,400[d]
Chile				
1950 .	1,583	15,451	11,500[d]	28,550[d]
1960 .	3,159	21,964	15,300[d]	40,423[d]
1963 .	4,857	23,410	17,000[d]	45,270[d]
Colombia				
1952 .	...	...	...	15,600[d]
1959 .	3,000	4,576	16,642	24,218
1962 .	4,660	...	...	...
Costa Rica				
1958 .	855	... (2,960[e]) ...		3,815
1962 .	1,289	829	...	...
Ecuador				
1960 .	642	4,671	2,653	7,966
1963 .	1,077	4,921	2,653	8,651
El Salvador				
1958 .	754	1,648	1,356	3,758
1961 .	1,035	389	3,499	4,923
Guatemala				
1960 .	1,218	4,804	...	...
1962 .	1,345	5,041	3,226	9,612
Haiti				
1962 .	444	57	—	501
Honduras				
1960 .	110	2,221	792	3,123
1962 .	344	2,097	690	3,131
Mexico				
1950 .	13,800	6,720	2,110	22,630
1960 .	30,300	16,900	11,800	59,000
Nicaragua				
1950 .	150	160	170	480
1961 .	830	702	1,054	2,586
Panama				
1960 .	646	... (773[e]) ...		1,419
1962 .	752	... (683[e]) ...		1,435
Paraguay				
1962 .	261	810	1,006	2,077
Peru				
1950 .	2,925	... (18,800[d,e]) ...		21,700[d]
1960 .	4,293	9,433	11,708	25,434
1963 .	4,111	9,348	12,073	25,532
Uruguay				
1960 .	271	2,160[d]	6,400[d]	8,831
1963 .	277	2,400[d]	6,250[d]	8,934
Venezuela				
1950 .	2,011	6,593	...	...
1960 .	8,312	9,723	8,408	26,443
1962 .	11,718	10,766	5,187	27,671

SOURCE: Official statistics.

[a] Concrete, bituminous and asphalt paving.

[b] Roads with gravel or crushed stone (macadam) or stabilized-soil surfaces, and roads with superficial bituminous treatment.

[c] The figures have been adjusted by eliminating, as far as possible, roads that are not open all the year round. Consequently this group covers only earth roads with the minimum grading and drainage work required to make them open to traffic all the year round.

[d] Estimate.

[e] Covers both improved and low-cost paved roads, and earth roads.

although to varying extents. Argentina and Peru were the only countries in which the all-weather road network increased somewhat slowly, its average annual growth rates being 0.6 per cent and 1.6 per cent respectively between 1950 and 1960, whereas in the other countries annual rates ranged from a modest 3.6 per cent in Chile to the very high figure of 18.4 per cent in Nicaragua (see table 81).

Table 82. Relative position of the Latin American road system, 1962

	All-weather roads (thousands) of km)	*Percentage of world total*	*Length of road networks (km)*	
			Per 1,000 km^2	*Per 1,000 inhabitants*
Africa[a] . .	775	6.0	26	3.0
Asia and the Middle East[b]	1,820	14.1	128	1.9
Latin America[c]	412	3.2	21	2.0
Oceania[a] .	658	5.1	77	38.6
World total[d] .	12,926	100.0	130	6.3

SOURCE: ECLA/OAS Transport Programme, on the basis of data from the *International Road Federation Staff Report, 1962*; and United Nations, *Statistical Yearbook, 1962*.

[a] Excluding certain dependent territories.

[b] Excluding mainland China, the Soviet Union and certain of the smaller countries.

[c] Excluding Cuba.

[d] Subject to the limitations indicated in the above notes. In addition certain of the smaller European countries are excluded, and some dependent territories in North America.

This expansion continued between 1960 and 1963, and although growth rates have slowed down in general, they are still quite high in a number of countries. The quality of the highways has also continued to improve. In fact, while the figures in table 81 are very general, they confirm the prevalence of this trend in nearly every country in the region. It will be noted, for example, that in Honduras the mileage of paved roads more than tripled in only two years. Perhaps more significant, because they were maintained over longer periods, are the growth rates for paved roads in Brazil, Nicaragua and Venezuela. In Brazil the annual rate of increase between 1955 and 1962 was 26 per cent.[7] In Nicaragua the average rate over a period of eleven years was 16.8 per cent, and in Venezuela a twelve-year average of 16 per cent was recorded. While not as high or as steadily sustained, the rates registered in Chile, Colombia, Ecuador, Costa Rica, and El Salvador are also worthy of mention; Mexico and Panama, too,

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[7] In 1955 Brazil's paved roads—not included in table 81—amounted to approximately 3,200 kilometres.

Table 83. Latin America: Road construction work carried out in selected countries

(*Kilometres*)

	1950–60	*1960*	*1961*	*1962*	*1963*
Argentina[a]					
Construction (basic construction work, various types of paving, tarring, etc.	...	227	772	863	
Improvements and repairs	...	370	972	780	
TOTAL	840	597	1,744	1,643	
Bolivia					
Construction	135.2[b]	131.0	74.7	104.1	
Improvement	228.7[b]	276.8	248.7	223.6	
Brazil[c]					
Basic construction work	2,689[d]	3,894	2,445	2,380	
Paving	1,109[d]	1,795	763	1,402	
Chile					
Construction	611	265	410	342	
Improvement	3,782	6,706	...	2,491	
Paving	134	296	579	999	
Colombia[e]					
Basic construction and surfacing	659[f]	1,134	3,106	1,998	
Paving	270[f]	186	109	222	
Ecuador					
Construction and paving	...	176	342	199	144
Mexico					
Total construction		7,905	5,890	7,678	7,364[g]
Including paving		1,630	1,002	1,307	1,221[g]
Uruguay					
Construction	...	64	132	224	203
Venezuela					
Construction	1,665[h]	410	406	509	608
Improvement		1,429	996	342	1,192
Paving and repaving	773[h]	917	1,005	1,468	2,113

SOURCE: Road statistics of the country concerned.

[a] National road network. Covers the period 1 November of the previous year to 31 October of the year considered.

[b] 1959.

[c] Covers work carried out directly by DNER and work delegated and financed by DNER.

[d] Annual average for the period 1956–59.

[e] Only national highways.

[f] Estimated annual average for 1951–58.

[g] Up to September.

[h] Average for the years 1949–58.

SOURCES: Reports of the road authorities of the country concerned.

[a] National network only; excludes investment and expenditure on provincial networks.

[b] Public expenditure on national, state and municipal highways. The only figures available for 1961 and 1962 are those covering the work carried out by the Departamento Nacional de Carreteras, which are not comparable with the figures shown in the table.

[c] Annual average for 1952–60.

[d] Covers investment in national, Departmental and municipal highways, and purchase of the necessary equipment.

[e] Covers the purchase of maintenance equipment, and expenditure on improvement and administration.

[f] Estimate.

[g] This apparently covers budget allocations and not actual disbursements, since the figures for maintenance and administration, as expressed in pesos at current prices, are exactly the same for each of the four years in question.

[h] Covers construction, repair, paving, improvement and purchase of machinery and equipment.

[i] Annual average for July 1956–June 1959.

[j] Annual average for 1955–60.

[k] Estimate based on the figures for eight months.

[l] Average for 1952, 1953, 1958 and 1959.

[m] Average for 1953, 1958 and 1959.

[n] Average for the period 1954–55 to 1959–60.

[o] 1959/60.

[p] 1960/61.

[q] 1961/62.

[r] Average for the period 1952–53 to 1957–58.

[s] Average for the period 1952–53 to 1959–60.

Table 84. Latin America: Investment and expenditure on roads in selected countries

Country	*Type of expenditure*	*1950–60*	*1960*	*1961*	*1962*	*1963*
Argentina[a] (Millions of 1950 pesos)	Total	417.0	557.1			
	Investment	248.5	389.7			
	Maintenance	107.0	106.3			
	Administration	61.5	61.1			
Brazil[b] (Thousands of millions of 1960 cruzeiros)	Total	31.4	46.3	...	...	...
	Investment	25.8	37.2	...	...	...
	Maintenance	5.6	9.1	...	...	...
Chile (Millions of 1960 escudos)	Total	36.9[c]	51.6		70.9	...
	Investment	27.0[c]	38.6		64.0	...
	Maintenance	3.3[c]	5.0			...
	Administration	6.6[c]	8.0		6.9	...
Colombia (Millions of 1960 pesos)	Total	...	215.2	398.4	430.6	247.4
	Maintenance[d]	...	151.6	305.3	299.0	132.8
	Administration[e]	...	63.6	93.1	131.6	114.6
Ecuador (Millions of 1960 sucres)	Total	202.7	218.7	260.1	178.1	152.0
Peru (Millions of 1960 soles)	Total	...	...	...	...	427.0
	Construction	...	...	...	287.6	279.0
	Maintenance and improvement	...	...	...	...	148.0
Uruguay[g] (Millions of 1960 pesos)	Total	...	78.9	95.1	124.5	75.2
	Construction	...	22.7	49.4	83.2	41.0
	Maintenance	...	45.5	37.0	33.5	27.7
	Administration	...	10.6	8.7	7.8	6.5
Venezuela (Millions of 1960 bolivares)	Total	706.0[i]	549.4	410.0	439.0	465.0
	Investment[h]	580.0[i]	436.2	303.0	311.0	379.0
	Maintenance	95.0[i]	103.2	99.0	118.0	77.0
	Administration	31.0[i]	10.0	8.4	9.5	9.2
Costa Rica (Millions of dollars)	Total	3,305.0[j]	4,240.0[k]	9,000.0	3,475.0	...
El Salvador (Millions of dollars)	Total	4,655.0[l]	...	6,400.0	6,500.0	2,378.0
	Construction	3,646.0[m]	...	...	...	642.0
	Improvement and maintenance	974.0[m]	...	...	...	1,547.0
	Administration and surveys	194.0[m]	...	...	...	189.0
Guatemala (Thousands of dollars)	Total	23,587[n]	15,145.0[o]	11,182.0[p]	12,850.0[q]	...
Honduras (Thousands of dollars)	Total	5,917.0[r]	...	10,000.0[p]	9.000.0[q]	...
	Investment	3,397.0[r]	...	...	...	...
	Maintenance	2,158.0[r]	...	...	...	...
	General expenditure	362.0[r]	...	...	...	...
Mexico (Thousands of dollars)	Total	57.0	68.8	69.7	80.1	
Nicaragua (Thousands of dollars)	Total	4,750.0[s]	3,957.0	3,070.0	2,872.0	
	Maintenance	1,129.0[s]	917.0	922.0	990.0	

See opposite page for Sources and Notes developed their paved road networks at a rapid pace. In the remaining countries, rates were more moderate. The length of the improved and low-cost road networks also increased fairly quickly, although not so fast as that of paved roads.

Lastly, it should be pointed out that in spite of the vigorous impetus given to the development of Latin America's road network during the period mentioned, the region is still at a considerable disadvantage in relation to the rest of the world. Table 82 presents a summary of the figures contained in the 1962 report of the International Road Federation, and clearly demonstrates that Latin America is in an unsatisfactory position, even compared with other developing areas such as Asia and Africa.

Table 85. Latin America: State of the Pan-American Highway System at the beginning of 1963
(*Kilometres*)

Country	*Total length*	*Paved*	*All-weather roads (unpaved)*	*Open only in the dry season*	*Not open to traffic*
Argentina	4,755	3,172	735	848	—
Bolivia	2,848	145	2,016	327	360
Brazil	6,225	3,608	2,380	237	—
Chile	3,372	1,638	1,391	194	149
Colombia	5,132[a]	1,879	2,596	—	657
Costa Rica	660	332	328	—	—
Ecuador	1,393	90	1,219	84	—
El Salvador	628	628	—	—	—
Guatemala	837	549	288	—	—
Honduras	243	243	—	—	—
Mexico	10,310	10,072	131	—	107
Nicaragua	384	339	45	—	—
Panama	850[a]	389	161	—	300
Paraguay	692	122	231	339	—
Peru	3,336	2,622	714	—	—
Uruguay	2,571	1,125	1,430	16	—
Venezuela	1,422	971	451	—	—
TOTAL	45,658	27,924	14,116	2,045	1,573

SOURCE: Ninth Pan-American Highway Congress, *Informe de la Secretaria Permanente*, document No. 96.

[a] Includes the projected road across the Darien area.

Table 83 provides some background data on construction and improvement projects carried out in several Latin American countries, which show the magnitude of the effort undertaken in recent years compared with achievements in the fifties. Table 84 furnishes similar information on the quantity and distribution of road investment and expenditure during the same periods.

In addition to the impetus given to road projects of primarily national importance, considerable progress has been made in recent years in building international road systems, particularly the Pan-American Highway. The Latin American Governments have accorded a high priority to the construction and improvement of the roads in their territories that form part of the Pan-American System. This effort has been facilitated by the fact that in many cases the highways in question constitute the backbone of the national networks, or at least important arterial roads. During 1960–63, substantial changes and advances were effected in the Pan-American Highway System, mainly in terms of the completion and paving of various sections and the construction of several alternate routes. At the beginning of 1963, the Pan-American System totalled 45,658 kilometres, of which 61 per cent were paved. Unpaved but all-weather roads totalled 31 per cent, which means that 92 per cent of the whole system consisted of roads open all the year round (see table 85). The only major break still interrupting the line of communication between Central and South America is an 830-kilometre stretch between Panama and Colombia known as the "Darien gap".

In Central America, the most important result of the Economic Integration Programme has been the application of a policy of accelerated development of national road networks, with special emphasis on international highways. The Inter-American Highway, which forms part of the Pan-American System, has been completed except for a few bridges and some stretches still to be paved. Work has also been done on other roads of regional importance, and, as the outcome of all these concentrated efforts, the Central American road network now totals some 5,200 kilometres. The completion and improvement of this regional network has been given increasing priority in recent years, and only 1,632 kilometres still remain to be built or re-built.

In other parts of Latin America, too, international road links not contemplated in the original Pan-American Highway project are in the planning stage. A case in point is the Pan-American Transverse Highway, which will link Brazil, Paraguay, Bolivia and Peru. Moreover, Brazil, Colombia and Ecuador are considering the possibility of building a highway which will connect up the three countries through the Amazon jungles. The Pacific coast of Colombia and Ecuador would thus be linked, via Manaos, to the Atlantic coast of Brazil.

Lastly, mention must be made of a project that is being energetically promoted by the Peruvian Government. A road to be known as the Carretera Marginal Bolivariana de la Selva would join up the unexplored regions east of the Andes which are drained by the three major river systems of the continent: those of the Orinoco, the Amazon and the Paraná. Representatives of the four countries interested in the project—Bolivia, Colombia, Ecuador and Peru—recently signed an agreement to study, with the co-operation of IDB, the feasibility of this highway, which would extend from Puerto Carreño to Corumbá, over a distance of some 6,500 kilometres.

Table 86. Latin America: Locomotive inventory in selected railway systems, 1960

	Argentina	*Bolivia*	*Brazil*	*Chile*[a]	*Colombia*	*Mexico*	*Peru*	*Uruguay*
Steam locomotives . . .	3,770	110	2,710	610	247	550	203	99
10 years old or less . .	72	23	78	30	27	...	...	—
11 to 20 years old . .	155	10	227	22	65	...	...	5
21 to 30 years old . .	110	1	133	75	10	...	...	—
31 to 40 years old . .	929	36	739	42	124	...	...	20
Over 40 years old . .	2,504	40	1,533	441	21	...	...	74
Percentage of inventory .	84	91	70	79	89	47	89	61
Percentage of traffic (gross ton-km hauled) .	...	...	9[b]	68	63	...	...	16
Diesel locomotives . . .	706	5	913	102	29	598	20	64
10 years old or less . .	647	2	723	91	29	398	...	64
11 to 20 years old . .	58	2	187	7	—	...	...	—
21 to 30 years old . .	1	1	3	4	—	...	...	—
Over 30 years old . .	—	—	—	—	—	...	...	—
Percentage of inventory .	16	4	24	13	11	52	9	39
Percentage of traffic (gross ton-km hauled) .	...	...	78[b]	20	37	...	...	84
Electric locomotives . .	—	6	224	62	—	10	5	—
10 years old or less . .	—	—	61	—	—	...	...	—
11 to 20 years old . .	—	—	94	19	—	...	...	—
21 to 30 years old . .	—	—	24	—	—	...	...	—
31 to 40 years old . .	—	1	45	43	—	...	...	—
Over 40 years old . .	—	5	—	—	—	...	...	—
Percentage of inventory .	—	5	6	8	—	1	2	—
Percentage of traffic (gross ton-km hauled) .	—	...	13[b]	12	—	...	...	—
TOTAL	4,476	121	3,847	774	276	1,158	228	163

SOURCES:

Argentina: IBRD Report.

Bolivia: Report of the Advisory Group, covering only the Andean system.

Brazil: Studies by the DNEF and RFF.

Chile: Colombia, Peru and Uruguay: Questionnaire sent to the railway companies.

Mexico: Railway statistics.

Note: The Central American countries had the following inventories of steam locomotives in 1960 or 1961: Costa Rica 45 (Ferrocarril del Norte only); El Salvador 55; Guatemala 90; Honduras 76; Nicaragua 27; and Panama 27. No data are available on diesel locomotives.

[a] Only northern and southern networks.

[b] Estimate.

3. RAILWAY EQUIPMENT

Latin America's railway equipment, like its track, is markedly obsolescent. The situation is particularly serious with respect to passenger coaches and goods wagons, since a major effort to modernize the locomotive park has already been made, chiefly through the introduction of diesel engines.

The period 1960–63 witnessed a continuation of the trend towards the gradual replacement of steam locomotives by diesel engines which began in the fifties and was common to all the Latin American countries. During the period in question, there was virtually a 300-per-cent rise in the number of diesel engines used by the railways in Argentina, Brazil and Mexico. These countries' imports, plus those of five other countries—Bolivia, Chile, Colombia, Peru and Uruguay—totalled about 2,000 diesel engines. As from 1960, Argentina, Brazil and Chile made substantial additional purchases (over 500 locomotives) and, to a lesser extent, the diesel engine inventory also continued to increase in Colombia, Mexico, Peru and Uruguay.

The situation with respect to traction equipment in some Latin American systems in 1960 is shown in table 86. It should be pointed out that, broadly speaking, railway inventories continue to include a large number of steam locomotives which in practice are already out of service, so that the real share of diesel engines in total traffic is much higher than is indicated by the data on the number and power of those available. Moreover, except in the case of the Mexican railways, utilization of these locomotives generally falls short of adequate levels of efficiency, chiefly because, in essence, the operational methods in force when steam engines predominated, with the same low-tonnage trains and even the same timetables, are still being used. Again, the lack of preventive maintenance and the failure to adapt most of the track

Table 87. Latin America: Passenger and freight rolling-stock in selected railway systems, 1960

	Argentina		*Brazil*[a]	*Bolivia*		*Chile*[b]		*Colombia*		*Peru*[a]	*Uruguay*		*Mexico*[a]
	I	*II*		*I*	*II*	*I*	*II*	*I*	*II*		*I*	*II*	
Goods wagons													
Covered wagons	3,521	39,689	29,516	353	474	1,352	2,483	882	911	...	369	708	16,068
High-sided open wagons	1,772	20,464	11,053	3	103	247	227	697	420	...	—	2	2,882
Low-sided open wagons or open wagons without sides	713	6,385	12,550	32	200	887	2,416	274	327	...	149	1,269	1,204
Cattle wagons	1,570	6,773	5,213	38	56	318	1,004	110	223	...	30	676	1,067
Tank wagons	1,802	2,502	795	5	50	57	18	107	142	...	41	54	2,282
Refrigerated wagons	43	329	270	—	2	40	13	—	3	...	—	—	10
Hopper-bottom wagons	—	—[c]	639	—	52	299	—	77	63	...	24	30	—
Other wagons	1,540	2,665	3,696	1	117	59	906	200	307	...	3	50	9,369[d]
TOTAL	10,961	78,807	63,732	432	1,054	3,259	7,067	2,347	2,396	3,559	616	2,789	32,882
Passenger coaches													
Standard metal coaches	418	115	648	3	105	394	220	81	364	...	16	—	879
Standard wood coaches	15	1,857	2,298			—	107	—	49	...	—	141	
Pullman and drawing room coaches	57	11	46	3	—	...	...	—	—	...	...	...	...
Sleeping coaches	—	503	288	—	14	...	...	—	—	...	...	...	218
Dining coaches	37	254	245	—	9	...	...	—	—	...	...	...	...
TOTAL	527	2,740	3,525	6	128	394	327	81	413	206	16	141	...
Electric coaches													
Powered	66	367	250	—	—	16	3	—	—	—	—	—	—
For hauling	3	273	494	—	—	—	—	—	—	—	—	—	—
TOTAL	69	640	744			16	3						
Diesel coaches													
Powered	56	250	66	3	9	2	4	67	10	74	14	40	10
For hauling	57	27	36	—	2	1	5	50	—	8	7	—	—
TOTAL	113	277	102	3	11	3	9	117	10	82	21	40	10
Guards' vans, mail vans and equipment	...	...	...	—	24	41	64	7	50	...	—	119	...

Note: The sources are the same as for table 85. Group I covers equipment less than 20 years old, and group II equipment over 20 years old.

[a] No classification by age, and for Peru no classification even by type.

[b] Only State railways.

[c] Not included in IBRD report, although it appears that there is a small number of these wagons, possibly included in "Other wagons".

[d] Including those belonging to private companies.

and workshops to the new type of traction are not conducive to optimum efficiency in the use of the new equipment.

As pointed out earlier, obsolescence of equipment and operational defects are even more marked in the passenger coach and goods wagon inventories of most Latin American railway systems. In 1960, over half the total park of goods wagons had been in use for more than forty years (see table 87). The old-fashioned goods wagons are heavy, which means that the locomotives available have to pull more dead weight than they should. Furthermore, maintenance is inadequate, and this inadequacy is aggravated by the shortage of spare parts. The operational deficiencies which exist in addition to those caused by the age of the equipment are also noteworthy. The commercial speed and total tonnage of goods trains continue to be low, except for the transport of ore, particularly in Brazil and Venezuela. General freight trains carry small loads and are still slow; their commercial speeds rarely exceed 20 kilometres per hour, and they seldom take more than 400 tons of freight per train.

Table 88. Latin America: Growth rate of motor-vehicle inventory

(Annual rate expressed as percentages)

Country	*Motor vehicles*		*Buses*		*Goods vehicles*		*Total*	
	1950–60	*1960–63*	*1950–60*	*1960–63*	*1950–60*	*1960–63*	*1950–60*	*1960–63*
Argentina	4.1	14.9[a]	2.3	4.4[a]	5.5	11.5	4.6	13.0[a]
Brazil .	10.4	8.0	7.9	3.7	12.1	2.0	11.0	5.0
Chile .	3.8	2.7	2.9	5.0	8.6	3.2	5.8	3.1
Colombia	10.4	11.5[a]	11.5	5.1[a]	12.9	2.5[a]	11.5	7.0[a]
Costa Rica	17.0	5.0	10.3	5.9	15.6	5.0	16.0	5.1
Ecuador .	23.6	5.5	13.0	4.6	23.4	5.6	22.0	5.4
El Salvador	8.4	5.2[a]	6.2	21.0[a]	17.5	38.9[a]	10.2	16.5[a]
Guatemala	12.3	11.4[a]	0.9	10.4[a]	9.7	43.0[a]	10.4	18.4[a]
Honduras	14.0	3.0[a]	5.3	5.4[a]	18.8	1.2[a]	15.6	2.8[a]
Mexico .	10.8	6.6[a]	3.5	0.0[a]	10.2	5.8[a]	10.2	6.1[a]
Nicaragua	20.0	−3.5[a]	14.9	29.7[a]	20.1	4.2[a]	19.7	0.4[a]
Panama .	4.7[b]	7.2[a]	3.6[b]	6.0[a]	4.0[b]	27.0[a]	3.6	11.8[a]
Peru .	9.6	9.7	7.5	8.7	9.0	7.5	9.2	8.7
Uruguay .	...	6.6	...	16.0	...	6.2	...	6.5
Venezuela	14.5	6.8	3.1	5.2	4.5	9.9	14.0	7.6

Source: National statistics of the registration of motor vehicles.

[a] Average for 1960–62.

[b] Average for 1955–60.

Passenger coaches are generally old, uncomfortable and largely made of boxwood, with the attendant risk to travellers. Special types of coach are relatively scarce and often inadequate. Here, too, commercial speeds are slow and time-tables inconvenient. Moreover, trains with locomotives of the traditional type are used on secondary lines, and waste their power pulling empty coaches. Except in suburban traffic, diesel or electric railcars are hardly used at all. There are very few modern units, with stainless-steel coaches, air suspension, air-conditioning and individual controls.

This being the case, the Latin American railway systems have begun to purchase new coaches and wagons and to recondition many of those now in use. The magnitude of replacement needs can be appreciated from the fact that the proposed purchases of Argentina, Brazil and Chile alone amount to some 25,000 goods wagons, apart from programmes providing for the reconditioning of brakes and couplings in the case of wagons still worth repairing. The purchases and reconditioning work already undertaken have improved the technical characteristics of the wagons, the trend being towards models for specialized transport and with a high unit capacity. The programmes of the countries mentioned also include the purchase of some 3,500 passenger coaches, all with metal bodywork. Furthermore, Argentina, Brazil, Chile and Mexico each have a major industry manufacturing railway coaches and wagons, using little imported material, and generally operating below capacity because demand is sporadic and unreliable.

The weakest point in the Latin American railway systems may very well be the workshops. Except for a few in Brazil and Mexico, there are none with modern and efficient plant for the repair of diesel engines; moreover, spare parts are in short supply because of financial and exchange problems.

Similar defects are to be found in the signal and communications systems.

4. MOTOR VEHICLES

The rapid growth of motor-vehicle goods and passenger traffic was sustained by a parallel increase in the number of vehicles in circulation. Generally speaking, the striking expansion of Latin America's motor-vehicle inventory between the end of the war and 1960 was followed by a drop in the growth rate between 1960 and 1963, although it is still high in several countries (see table 88).

Table 89 shows the motor-vehicle inventory as at the most recent date for which figures are available, and indicates the notable size of the motor-vehicle fleets in Brazil, Argentina and Mexico, the three largest countries in the region. The inventory in Venezuela is also substantial, especially in view of the country's smaller area and population.

The rapid increase in the motor-vehicle inventory since 1950 has doubled the motorization coefficient in the Latin American countries. Despite such considerable progress, however, the coefficients are still far below those registered in more developed areas, as can be seen from the figures in table 90. They are nevertheless a good deal higher in Latin America than in Asia and Africa, particularly if commercial vehicles only (lorries and buses) are considered. The Latin American coefficient for these vehicles in 1961 was 8.2, as compared with 2.8 and 2.5 per cent, respectively, in the African and Asian countries, and 10.8 per cent in the countries of Eastern Europe.

Table 89. Latin America: Inventory of motor vehicles, 1963
(*Thousands of units*)

Country	*Private cars*	*Buses*	*Goods vehicles*	*Total*
Argentina[a]	623.8	15.6	513.0	1,152.4
Brazil	674.9	62.1	571.7	1,308.7
Chile	62.4	7.5	69.3	139.2
Colombia[a]	108.0	22.5	78.2	208.7
Costa Rica	22.2	1.9	11.8	36.0
Ecuador	23.1	3.9	6.1	33.1
El Salvador[a]	17.7	1.5	13.5	32.7
Guatemala[a]	31.0	2.8	14.6	48.4
Honduras[a]	5.8	1.4	4.4	11.6
Mexico[a]	548.2	26.1	327.9	902.2
Nicaragua[a]	8.1	0.8	5.4	14.3
Panama[a]	20.2	1.8	8.7	30.7
Peru	105.4	9.0	70.5	184.9
Uruguay	98.0	2.6	74.0	174.6
Venezuela	325.2	7.9	128.5	461.6

SOURCE: Official statistics.

[a] 1962.

Table 91 also shows that motorization coefficients vary widely in Latin America (from 5·6 vehicles per mil. inhabitants in Honduras to 66.9 vehicles in Uruguay), although there have been marked improvements in all cases.

Table 90. Motor vehicles per mil inhabitants in selected regions, 1961

Region	*Private cars*	*All motor vehicles*
Africa	7.5	10.3
Asia[a]	2.0	4.5
Europe (Eastern)[b]	3.6	14.4
Europe (other countries)[c]	81.0	100.0
Latin America[d]	12.2	20.4
United States and Canada[e]	332.0	400.0

SOURCE: ECLA/OAS Transport Programme, based on the United Nations *Statistical Yearbook*.

[a] Excluding mainland China, the Democratic People's Republic of Korea, the Democratic Republic of Viet-Nam and the Soviet Union.

[b] 1960. Covers Albania, Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania, the Soviet Union and Yugoslavia.

[c] The coefficients for the six countries of the European Economic Community, which have a strong influence on the average, are 89 cars and 109 motor vehicles per mil inhabitants.

[d] Excluding Cuba and Haiti.

[e] Includes Puerto Rico and the Canal Zone.

Table 91. Latin America: Evolution of number of motor vehicles per mil inhabitants, 1950–62

Country	*Private cars*			*All motor vehicles*		
	1950	*1960*	*1962*	*1950*	*1960*	*1962*
Argentina	18.5	22.6	28.7	33.3	43.0	53.0
Bolivia	1.1	3.9[a]	...	3.9	10.4[a]	...
Brazil	3.8	7.6	8.8[b]	7.6	16.1	17.0[b]
Chile	6.6	7.6	7.6[b]	11.8	16.6	17.0[b]
Colombia	2.8	5.6	6.6	5.2	11.8	12.8
Costa Rica	5.0	15.9	16.3[b]	8.7	25.7	26.5[b]
Cuba	12.7	26.1[a]	...	19.0	33.2[a]	...
Ecuador	0.4	4.6	4.9[b]	1.3	6.6	7.0[b]
El Salvador	3.6	6.6	6.8	4.9	9.9	12.6
Guatemala	2.8	6.6	7.8	4.6	9.2	12.2
Honduras	1.1	2.8	2.8	2.2	6.7	5.6
Mexico	6.7	13.4	14.2	11.5	22.3	23.4
Nicaragua	1.5	5.8	5.1	2.5	10.1	9.0
Panama	17.6[c]	16.7	18.1	21.7[c]	23.3	27.6
Paraguay	1.2	2.4	...	2.4	4.4	...
Peru	4.0	7.9	9.6[b]	7.4	14.2	16.9[b]
Uruguay	18.3	35.3[a]	38.0	28.7	62.9[a]	66.9
Venezuela	14.0	36.4	40.0[b]	27.2	50.5	56.8[b]
Latin America	6.8	10.9[a]	13.4	12.2	20.0[a]	23.6

SOURCES: Official statistics of the country concerned.

[a] 1959.

[b] 1963.

[c] Adjusted figure.

The impressive increase in Latin America's motor-vehicle inventory and the improved motorization coefficients were achieved in many countries only at the cost of keeping vehicles in service much too long.

Table 92. Latin America: Imports of motor vehicles, 1960–63

(*Units*)

Country	1960				1961				1962				1963			
	Private cars	*Lorries*	*Buses*	*Total*	*Private cars*	*Lorries*	*Buses*	*Total*	*Private cars*	*Lorries*	*Buses*	*Total*	*Private cars*	*Lorries*	*Buses*	*Total*
Argentina	3,251	2,827	—	6,078	2,876	1,578	—	4,454	2,145	2,658	—	4,803				
Brazil .	6,130[a]	14,567[b]	77	20,774	700[a]	1,560[b]	111	2,371	111	89[b]	81	281				
Chile .	5,454[a]	11,421[b]	245	17,120	7,918[d]	14,937[b]	520	23,375	5,814[a]	9,404[b]	259	15,477				
Colombia	6,769[a]	8,865[c]	2	15,636	17,089[a]	1,976[c]	—	19,065	5,587[a]	2,569[b]	4	8,160				
Costa Rica	1,589[a]	723[c]	147	2,459	1,501[a]	783[c]	140	2,424	1,246[a]	672[c]	186	2,104				
Dominican Republic	1,132	424	—	1,556	766	276	—	1,042	…	…	…	…				
Ecuador	2,036[a]	1,942	18	3,978	2,183[a]	1,595	19	3,797	917[a]	1,461	17	2,395				
El Salvador	2,386[a]	762	272	3,420	1,835[a]	642	200	2,677	1,815[a]	542	184	2,541				
Guatemala	2,016[a]	1,173	311		…	…	…	…	…	…	…	…				
Honduras	917[a]	702	191	1,810	854[a]	616	140	1,610	…	…	…	…				
Mexico .	8,159[e,f]	848[f]	81	9,088	1,152[e,g]	568[g]	108	1,828	1,289[e,h]	573[h]	766	2,628				
Panama .	4,262[a]	810[c]	187	5,259	3,611[a]	838[c]	420	4,869	…	…	…	…				
Paraguay	599[a]	859[i]	…	1,458	620[a]	1,370[i]	…	1,990	786[a]	1,839[i]	…	2,625				
Peru .	5,375[a]	5,301	68	10,744	9,344[a]	7,702	154	17,200	11,316[a]	6,602	257	18,175				
Uruguay	1,838	3,655	12	5,505	3,113	4,943	43	8,099	1,373	2,228	158	3,759	306	2,586	458	3,350
Venezuela	16,498	7,768	—	24,266	12,606	7,057	—	19,663	7,432	5,442		12,874				

SOURCE: Foreign trade yearbooks for Brazil, Chile, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama and Paraguay.

[a] Includes jeeps.

[b] Includes chassis for lorries, light trucks, delivery vans and similar vehicles.

[c] Includes chassis for buses and lorries, panel trucks and pick-up trucks.

[d] Covers jeeps and station wagons.

[e] Station wagons.

[f] Excludes imports of 28,561 cars and 17,700 lorries for assembly in the country.

[g] Excludes imports of 41,727 cars and 18,574 lorries for assembly in the country.

[h] Excludes imports of 43,248 cars and 18,758 lorries for assembly in the country.

Buses and lorries.

Considering that many countries are permanently short of spare parts because of balance-of-payments difficulties, that the wear and tear on vehicles is abnormal because of the poor condition of most of the roads, and that the need for systematic preventive maintenance is not sufficiently appreciated, it is understandable that the general technical condition of motor-vehicle equipment in Latin America is hardly even fair.

Table 92 indicates the number of motor vehicles imported into the Latin American countries between 1960 and 1963. With few exceptions, the trend is towards a reduction of imports, which is even more marked in comparison with import figures for the ten previous years, particularly in those countries which have developed their own manufacturing or assembly plants. The relative decrease in imports in countries which are not in this position, and must therefore resort to external markets in expanding or replacing their motor-vehicle inventory, is due chiefly to balance-of-payments difficulties which compel the national authorities to impose restrictions on imports of vehicles.

Table 93. Latin America: Manufacture and assembly of motor vehicles in selected countries, 1962–63

(*Units*)

Country	*1960*			*1961*			*1962*			*1963*		
	Private cars	*Lorries*	*Total*	*Private cars*	*Lorries*	*Total*	*Private cars*	*Lorries*	*Total*	*Private cars*	*Lorries*	*Total*
Argentina	72,343	16,485	88,828	117,055	22,721	139,766	116,915	12,099	129,014	97,437	7,987	105,424
Brazil .	57,357	75,721	133,078	72,683[a]	72,991[b]	145,674	97,134[a]	94,060[b]	191,194	99,945[a]	74,181[b]	174,126
Chile .	1,926[a]	391[b]	2,317	2,715[a]	1,224[b]	3,939	5,359	1,256[b]	6,615	6,309[a]	1,630[b]	7,939
Mexico .	31,788	20,500	52,288	42,573	22,287	64,860	41,745	24,280	66,025	48,981	26,852	75,833
Peru .		474	474		646	646		775	775	...	...	...
Venezuela	6,452	3,882	10,334	8,842	2,945	11,787	8,768	2,898	11,666	19,491[c]	6,919[c]	26,410[c]

SOURCE: Corporación de Fomento de la Producción (CORFO) and Comisión de Fomento Industria Automotriz, Chile.

[a] Includes jeeps and station wagons.

[b] Includes light trucks and delivery vans.

[c] December output estimated.

Table 94. Latin America: Evolution of main merchant fleets, 1949–63

(*Thousands of deadweight tons*)

Country or region	*1949*[a]		*1953*[a]		*1958*[a]		*1962*[b]		*1963*[b]	
	Number	*Deadweight tonnage*	*Number*	*Deadweight tonnage*	*Number*	*Deadweight tonnage*	*Number*	*Deadweight tonnage*	*Number*	*Deadweight tonnage*
Argentina . . .	117	932	146	1,170	146	1,185	235	1,592	215	1,574
Brazil	169	896	196	1,096	201	1,121	285	1,568	295	1,673
Chile	42	212	44	252	49	271	55	334	55	352
Colombia . . .	10	39	16	72	24	129	29	165	29	165
Ecuador . . .	5	20	8	22	7	27	9	34	9	34
Mexico	21	160	29	213	30	228	43	245	51	355
Paraguay . . .	4	4	4	4	4	4	24	20	25	21
Peru	19	102	23	115	23	125	39	187	43	232
Uruguay . . .	11	104	9	81	15	97	19	139	18	137
Venezuela . . .	49	186	53	242	46	340	43	462	45	463
TOTAL, LATIN AMERICA	447	2,655	528	3,267	545	3,527	781	4,746	785	5,006
Panama[c]	462	4,613	540	5,931	546	6,609	538	5,370	...	5,450[d]
World total . .	12,868	103,461	14,370	119,427	16,966	158,047	23,347	190,400[d]	...	203,083[d]
Latin America as a percentage of world total		2.6		2.7		2.2		2.5		2.5

SOURCES: For 1949, 1953 and 1958, United States Department of Commerce, *The Handbook of Merchant Shipping Statistics, 1958.*

For 1962 and 1963, the figures were prepared on the basis of information from the main Latin American shipping companies, the Instituto de Estudios de la Marina Mercante Argentina, the Comissão de Marinha Mercante do Brasil, the Asociación Nacional de Armadores de Chile, and Lloyd's Register of Shipping, 1962–63.

[a] Only vessels of 1,000 gross registered tons or over.

[b] Only vessels of 500 gross registered tons or over.

[c] Not included as part of Latin America, since the Panamanian flag is a flag of convenience.

[d] Estimate.

As already pointed out, the motor-vehicle industry has developed fairly rapidly over the past ten years, although in some cases on anti-economic lines. Two Latin American countries—Argentina and Brazil—have already attained high domestic content figures in their respective industries. Some 60 per cent of Argentina's motor-vehicle production, in terms of value, is represented by domestic materials and labour; in Brazil, about 80 per cent of output, in terms of weight, is added locally. This favourable situation has resulted from substantial investment, both in motor-vehicle plants and in accessory industries. In the other Latin American countries that have developed motor-vehicle industries in varying degrees, the production units are mainly assembly plants, the percentage of domestic parts used fluctuating around what are still very low levels.

Motor-vehicle production between 1960 and 1963 in the countries mentioned is shown in table 93. It will be seen that both Argentina and Brazil developed their industries rapidly, to a point where the relatively high production levels reached virtually meet their normal replacement requirements. The rapid increase in output in the assembly plants set up in other countries can also be noted.

5. Merchant shipping

The recent changes in the transport capacity of Latin American shipping have strengthened the trends followed over the longer term. Between 1949 and 1963, the capacity in question rose by about 90 per cent, from 2,655,000 tons to 5,006,000 tons dead weight (see table 94), although its share in total world tonnage afloat decreased slightly (from 2.6 to 2.5 per cent).

During the same period, significant changes also occurred in the composition of Latin American shipping. Following a pattern observable throughout the world, he dead-weight tonnage of dry-cargo boats dropped from 75 per cent to 55 per cent of the total, whereas that of tankers rose from 25 per cent to 45 per cent. The same phenomenon can be observed in tonnage increases by type of vessel (see table 95).

If the new units added—whether recently built or purchased second-hand—are balanced against losses through sale, breaking-up or shipwreck, it will be seen that Latin America's merchant marines showed a net increase of nearly 262,000 tons dead weight in 1963, equivalent to an annual rate of approximately 6 per cent. When these figures are broken down by type of vessel, it may be noted that the total net increase in freighter tonnage was barely 2 per cent (92,000 tons added and 36,000 tons deducted), while the tonnage of tankers rose by 10 per cent (206,000 tons purchased and built).

The Latin American merchant fleets which expanded most in 1963 were those of Mexico, Brazil and Peru, with 110,000 tons, 105,000 tons and 45,000 tons dead weight respectively. These figures represent 41 per cent, 7 per cent and 24 per cent of the total tonnage possessed by the respective countries in 1962. Argentina and Uruguay, on the other hand, saw their merchant shipping reduced by slightly over 1 per cent, while Chile increased its capacity by 6 per cent, and Paraguay by 5 per cent. The merchant fleets of the other countries remained unchanged.

As at 31 December 1963, the merchant shipping of the ten countries concerned amounted to 5,006,000 tons dead weight, of which dry-cargo vessels represented 2,739,000 and tankers 2,267,000 tons. The average age of the ships was fifteen years, compared with a world average at the same date of little more than eleven years. True, the age of Latin American vessels varies considerably not only from country to country but within each country, according to the concern which owns the ships and the traffic they handle; and it should be noted that the average age of those Latin American ships which provide an external service is also about eleven years.

Table 95. Latin America: Increase in deadweight tonnage of main fleets, 1953–63[a]

(Annual averages in thousands of deadweight tons)

Flag	*Total*			*Dry cargo vessels*			*Tankers*		
	1953–58	*1959–62*	*1963*	*1953–58*	*1959–62*	*1963*	*1953–58*	*1959–62*	*1963*
Argentina	3	102	−18	−1	29	−21	4	73	3
Brazil	5	112	105	2	44	39	3	68	66
Chile	4	16	20	4	4	−13	—	12	33
Colombia	11	9		11	5		—	4	
Ecuador	1	2		1	2		—	—	
Mexico	3	4	110	2	6	6	1	−2	104
Paraguay	—	4	1	—	3	1	—	1	
Peru	2	15	45	1	3	45	1	12	
Uruguay	3	10	−2	3	3	−2	—	7	
Venezuela	19	30	1	6	—	1	13	30	
Total	51	304	262	29	99	56	22	205	206
Average annual percentage increase	1.5	7.0	5.6	1.2	3.9	2.1	1.8	11.7	10.0

Source: ECLA, 1953–62 IEMMA, Argentina, *Panorama Naviero Iberoamericano*, 1963.

[a] Only vessels of 500 registered gross tons or over.

C. ECONOMIC AND FINANCIAL CONSIDERATIONS

It is useful to supplement the review of the evolution of the transport sector (traffic, infrastructure and equipment) presented in earlier sections by a brief reference to certain economic and financial aspects of the problem which have acquired added significance precisely because of the way in which transport has developed.

1. TRANSPORT DEVELOPMENT PROGRAMMES

The investment funds systematically allocated to the improvement and expansion of transport media are substantial enough to warrant a great effort at more rational selection, within the sector as a whole, of the specific fields for which they are intended. The establishment of the most suitable criteria for determining the distribution of these funds is, moreover, particularly important in view of the marked structural changes taking place in the transport sector, although these changes might to some extent be dubbed abnormal, because of the difficult position of the railways. The need for such criteria also arises from certain characteristics proper to the sector itself, such as the slow maturing of investment, the permanent nature of many of the projects undertaken and their close relation to the development and economic efficiency of the other sectors of activity. All this leads to the conclusion that there is hardly any sector in which the need for broad and well-prepared development programmes is more pressing.

While programming for the transport sector is not new in Latin America, its effectiveness is likely to be enhanced by two developments which have occurred recently. One is the greater stress being placed on planning at the national level, which locates transport development programmes within a broader frame of reference and thus ensures their consistency with the development objectives of the other sectors of economic activity. The second relates to the sector itself, and stems from the extension of programming from specific transport infrastructures to a broader field which includes the need for replacing, modernizing and expanding equipment, as well as the establishment of criteria for the combined programming of the various means of transport with a view to improving co-ordination.

Strictly speaking, these efforts are only just beginning, and their progressive improvement should therefore be facilitated by the gradual compilation of experiences in this field. To this end the few comments set out below are directed. They are based on consideration of the following programmes: the Argentine long-range transport plan (Plan de Largo Alcance de los Transportes Argentinos) for the period 1962–70, which was the subject of a study—begun in September 1960 and delivered to the Argentine Government in February 1962—that was carried out with the financial assistance of the United Nations Special Fund and the International Bank for Reconstruction and Development (IBRD) and with the co-operation of United States and European firms of consultants designated by the Bank; the Colombian plan to improve national transport (Plan de Mejoramiento para los Transportes Nacionales de Colombia), relating to the period 1962–71, and formulated in 1961 by a United States firm of engineering consultants recommended by IBRD, which contributed to the financing of the plan; the Chilean transport programme (Programa de Transportes) for 1961–70, prepared as part of the national economic development programme (Programa Nacional de Desarrollo Económico) of the Chilean Development Corporation (CORFO), and completed in June 1961; Bolivia's provisional transport programme (Programa Preliminar de Desarrollo de los Transportes de Bolivia)—formulated by the Government with advisory assistance from a group of ECLA, FAO and BTAO experts, as part of an over-all economic and social development plan (Plan General de Desarrollo Económico y Social de Bolivia) for the ten-year period 1962–71—and the two-year investment plan (Plan Bienal de Inversiones) for 1963–64 which was drawn up subsequently; the Peruvian transport investment programme (Programa de Inversiones en Transportes), which forms part of the national economic and social development plan (Plan Nacional de Desarrollo Económico y Social) for 1962–71; the 1963–65 Brazilian programme of total transport investment incorporated in the three-year economic and social development plan (Plano Trienal do Desenvolvimento Economico e Social), published in December 1962, and prepared by the Comissão Nacional do Planeamento; and the national transport investment programme (Programa de Inversiones del Sector Transportes) of Venezuela, included in the national plan (Plan de la Nación) for 1963–66, which was drawn up by the Oficina Central de Coordinación y Planificación and published in May 1963.[8]

It should be pointed out, in the first place, that the funds to be invested under these programmes are an indication of the vast effort which the countries concerned will have to make in order to bring their transport systems up to the level needed to meet the minimum requirements of economic development, and to recoup—above all in respect of railways—the acute net disinvestment of the past (see table 96).

The magnitude of the total investment to be made under Argentina's programmes is reflected in the fact that the average annual investment for the Plan as a whole represents 2.8 per cent of the gross domestic product at 1961 market prices,[9] while the average for the first three years—1962 to 1964—amounts to 4 per cent (see table 97). Moreover, the Argentine programme covers only part of the country's transport needs, since it does not include aviation, urban transport, motor vehicles (lorries, buses, private cars, etc.), ocean-going and coastwise shipping, much of the river fleet and some of the inland waterway traffic.

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[8] Piecemeal programmes and plans have also been drawn up in Mexico, a country which is forging ahead with the institutional and administrative arrangements essential to joint programming of the transport sector, particularly in the planning department of the Office of the President (Dirección de Planeación de la Secretaría de la Presidencia). Substantial progress has also been achieved in Central American transport programming, particularly with a view to integration of the Central American highway network.

[9] Both for Argentina and for the other countries the funds invested in transport are related to the gross product of the year for which they were calculated. Comparable prices can thus be obtained. If the product should increase during the period covered by the programme, the percentage of investment in transport would be slightly lower, but the order of magnitude of the figures would not change.

In Colombia, the average annual gross investment programmed for the period 1962–66 was 4.1 per cent of the gross domestic product at 1960 market prices, or 1.6 per cent if motor vehicles are excluded. This is also an incomplete programme, which moreover, for certain items includes only a very conservative estimate of the funds to be invested by the Government and by decentralized agencies.[10]

Table 96. Latin America: Planned transport investments, in selected countries

(*Millions of dollars*)

Type of transport	*Argentina (1962–1970)*		*Chile (1961–70)*		*Colombia (1962–71)*		*Bolivia (1963–1964)*	*Brazil (1963–1965)*	*Peru (1962–1971)*	*Venezuela (1963–1966)*
	Total	*Foreign currency*	*Total*	*Foreign currency*	*Total*	*Foreign currency*				
Railways	1,447.0	972.5	312.7	114.6	134.7	86.2	74.0	266.7	8.1	—
Roads	1,239.5	337.9	508.7	131.7	445.3	173.2	31.4	648.4	348.7	565.9
Shipping and harbours	169.7	41.5	137.4	112.5	37.4	17.1	0.8	240.0	101.2	45.7
Aviation	—	—	69.2	55.5	28.7	1.5	9.4	74.0	5.3	31.7
Motor vehicles	—	—	377.6	224.1	1,000.0	640.0	—	690.0	—	106.0
TOTAL	2,856.2	1,351.9	1,405.6	638.4	1,646.1	918.0	45.0	1,919.1	464.6	749.3

SOURCES AND NOTES:

Argentina: Long-term plan for Argentine transport (Transportes Argentinos. Plan de Largo Alcance). Firms of consultants: Coverdale and Colpitts (United States), Netherlands Engineering Consultants (NEDECO) (Netherlands), and Renardet-SAUTI (Italy), on the basis of contracts with the International Bank for Reconstruction and Development (IBRD).

The investment in roads is for national highways and certain provincial highways. The investment in shipping and harbours includes only certain investments in the most important maritime and river harbours, and part of the investment for improvement of inland waterways. Exchange rate used: 83 pesos to the dollar.

Chile: Transport programme (Programa de Transportes), 1961–70, of the Corporación de Fomento de la Producción (CORFO).

Very little expenditure on harbours is proposed. Investment in motor vehicles does not include private cars and similar vehicles or an increase in the inventory of light trucks. Exchange rate used: 1.05 escudos to the dollar.

Colombia: Plan for the improvement of national transport (Plan de Mejoramiento para los Transportes Nacionales). Firm of consultants: Parsons, Brinckerhoff, Guade and Douglas, recommended by IBRD.

The investment in roads covers both national and Departmental roads. Investment in shipping and harbours covers only certain investment in the River Magdalena and river ports and a minimum plan for improvement of the four main coastal ports. Investment in motor vehicles does not include private cars and similar vehicles. Exchange rate used: 6.70 pesos to the dollar.

Bolivia: Two-year transport and communications plan (Plan Bienal de Transportes y Comunicaciones), Junta Nacional de Planeamiento. Investments do not cover all requirements, except in the case of roads.

Brazil: Three-year economic and social development plan (Plano Trienal do Desenvolvimento Econômico e Social), 1963–65, Office of the President of the Republic.

The investment in motor vehicles does not include private cars; but it covers purchases of commercial vessels and aircraft by private companies, which could not be distinguished from other purchases. Exchange rate used: 450 cruzeiros to the dollar.

Peru: National economic and social development plan (Plan Nacional de Desarrollo Económico y Social del Perú), Peruvian Government.

The programme of investment in railways is incomplete and covers only 1962–65. The merchant fleet programme covers only 1963–68, and the airport programme 1962–66. The Peruvian programme does not cover investment in motor vehicles, inland waterway transport or aircraft. Exchange rate used: 27 soles to the dollar.

Venezuela: National plan (Plan de la Nación), 1963–66, Oficina Central de Coordinación y Planificación.

Private investment totalling 20.9 million dollars in ships and aircraft, provided for as a whole under the plan, is divided equally between them. Exchange rate used: 3.35 bolívares to the dollar.

In Chile, annual investment in transport for the period 1961–70 averages 2.9 per cent of the gross domestic product for 1960–61, and 3.12 per cent in the first half of the period in question. If investment in motor vehicles is excluded, average annual investment in the first five years works out at 2.4 per cent of the gross domestic product.

The investment in transport which Bolivia proposes to make under the 1963–64 two-year plan (Plan Bienal) amounts to 6.1 per cent of the country's gross domestic product in 1959, although for some sectors—particularly railway and inland waterway transport—it falls short of total requirements. Nor has provision been made for the requisite investment in motor vehicles, while investment in railways under the Plan Bienal is very low.

In Peru, the average annual investment projected for the ten-year period 1962–71 represents 2 per cent of the gross domestic product at 1961 market prices, the average for the first five-year period (1962–66) being 2.1 per cent. These relatively low percentages are possibly due to the fact that motor vehicle, air and urban transport requirements are not covered, and that the programmes which are included are not complete, except in the case of highways.

As regards Brazil, the total gross sum to be invested annually in the transport sector over the three-year period 1963–66 constitutes 8.2 per cent of the gross domestic product at 1962 market prices if motor vehicles (other than private cars) are taken into account, and 5.2 per cent if they are not. Total investment in transport should amount to 7.1 per cent of the gross product projected for 1963–66. In accordance with previous experience and estimated requirements, investment in transport will probably absorb 29 per cent of the total gross sum which the country proposes to invest in the three-year period.

In Venezuela, the average annual gross investment in the transport sector planned for the four-year period 1963–66 amounts to 2.4 per cent of the gross domestic product at 1961 market prices if motor vehicles are included, and to 2.1 per cent if they are not.

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[10] Under the four-year economic development plan for 1961–64 (Plan Cuatrienal de Desarrollo Económico) of the Planning and Technical Services Administrative Department (Departamento Administrativo de Planeación y Servicios Técnicos) of the Colombian Government, total investment in transport, including private cars and pipelines, amounts to 24 per cent of total gross investment in fixed capital, and the annual average represents 6.5 per cent of the gross domestic product for 1960.

From a broader standpoint, a study of the above programmes leads to the following general conclusions:

Table 97. Latin America: Average annual investment programmed for transport, in selected countries

Country	*Period*	*Railways*	*Roads*	*Shipping and harbours*	*Aviation*	*Motor vehicles*	*Total*	*Total excluding motor vehicles*
				Millions of dollars				
Argentina	(1962–1964)	242.5	169.6	32.7	—	—	—	444.9
Bolivia	(1963–1964)	1.7	15.7	0.4	4.7	—	—	22.5
Brazil	(1963–1965)	88.9	216.1	80.0	24.7	230.0	639.7	409.7
Chile	(1961–1965)	41.4	48.3	18.8	9.1	34.9	152.5	117.6
Colombia	(1962–1966)	14.2	40.3	5.2	3.9	100.0[a]	163.6	63.6
Peru	(1962–1966)[b]	2.0	34.7	11.9	1.1	—	—	49.7
Venezuela	(1963–1966)	—	141.5	11.4	8.0	26.5	187.4	160.9
				Percentage				
Argentina								
Of total excluding motor vehicles . .		54.5	38.2	7.3	—	—	—	100.0
Of gross domestic product at 1961 market prices		2.16	1.51	0.29	—	—	—	3.96
Bolivia								
Of total excluding motor vehicles . .		7.5	69.8	1.8	20.9	—	—	100.0
Of gross domestic product at 1959 market prices		0.46	4.26	0.11	1.28	—	—	6.12
Brazil								
Of total excluding motor vehicles . .		21.7	52.7	19.5	6.1	—	—	100.0
Of total		13.9	33.7	12.5	3.9	36.0	100.0	—
Of gross domestic product at 1962 market prices		1.14	2.76	1.02	0.32	2.94	8.17	5.24
Chile								
Of total excluding motor vehicles . .		35.2	41.1	16.0	7.7	—	—	100.0
Of total		27.2	31.7	12.3	6.0	22.8	100.0	—
Of gross domestic product at 1960-61 prices		0.85	0.99	0.39	0.19	0.71	3.12	2.41
Colombia								
Of total excluding motor vehicles . .		22.3	63.3	8.2	6.2	—	—	100.0
Of total		8.7	24.6	3.2	2.4	61.1	100.0	—
Of gross domestic product at 1960 market prices		0.36	1.02	0.13	0.10	2.53	4.14	1.61
Peru								
Of total excluding motor vehicles . .		4.0	69.8	24.0	2.2	—	—	100.0
Of gross domestic product at 1961 market prices		0.09	1.49	0.51	0.05	—	—	2.14
Venezuela								
Of total excluding motor vehicles . .		—	87.9	7.1	5.0	—	—	100.0
Of total		—	75.5	6.1	4.3	14.1	100.0	—
Of gross domestic product at 1961 market prices		—	1.82	0.15	0.10	0.34	2.42	2.08

SOURCES: As for table 96.

[a] 1962-71.

[b] Railways, 1962–65; ships, 1963–66.

(*a*) Very few countries have drawn up fairly comprehensive transport programmes, particularly programmes properly integrated with over-all development plans. Others have studied short-term programmes or programmes covering one or more specific means of transport, but have no co-ordinated programmes in which several transport media are included. Investment estimates are often based on over-all criteria and coefficients, because of the lack of available projects, draft projects or even preliminary project studies at a more specific level. As a result, plans have often had to be substantially revised and adjusted. Moreover, there is ample room for progressive improvement of the techniques used in the projection and programming of transport requirements;

(*b*) The scope and guiding principles of transport policy are not uniform in the diverse plans. There are marked disparities in the shares of total investment allocated to the transport sector as a whole, and to the various means of transport, and these divergencies cannot always be explained by the fact that conditions differ from one country to another. This only goes to show the complexity of the problems affecting the sector, and the lack of sufficient background data and research to make clear what technical and economic solutions would be the best;

(*c*) In many instances, the initial formulation of programmes has not been followed up by the establishment or strengthening of appropriate over-all transport programming agencies responsible for revision and application of the plans on a continuing basis. Likewise, proper attention has not always been paid to the need for administrative and operational reorganization and modernization of the transport networks, or to measures designed to increase the productivity of existing systems;

Table 98. Latin America: External loans for transport[a]

(*Millions of dollars*)

Institutions, dates and terms	*Railways*		*Roads*		*Motor transport*		*Harbours*		*Airports and aviation*		*Total*	
	Granted	*Taken up*	*Granted*	*Taken up*	*Granted*	*Taken up*	*Granted*	*Taken up*	*Granted*	*Taken up*	*Granted*	*Taken up*
IBRD	175.6	131.0	358.3	178.3	—	—	25.2	21.7	—	—	559.1	331.0
(*a*) Prior to 1960	126.9	125.8	136.9	135.7	—	—	25.2	21.7	—	—	289.0	283.2
Long-term	126.9	125.8	73.4	72.2	—	—	25.2	21.7	—	—	225.5	219.7
(*b*) 1960–63	48.7	5.2	221.4	42.6	—	—	—	—	—	—	270,1	47.8
Long-term	48.7	5.2	211.4	39.5	—	—	—	—	—	—	260.1	44.7
International Development Association												
(*b*) 1960–63, long-term	—	—	67.4	9.6	—	—	—	—	—	—	67.4	9.6
Inter-American Development Bank (IDB)												
(*b*) 1960–63	—	—	8.2	0.9	—	—	9.2	—	—	—	17.4	0.9
Long-term	—	—	7.9	0.9	—	—	9.2	—	—	—	17.1	0.9
Eximbank	442.9	436.6	186.6	130.3	7.1	3.0	27.4	22.6	40.4	37.1	704.4	629.6
(*a*) Prior to 1960	361.4	359.5	102.3	97.5	0.1	0.1	25.0	21.7	13.8	12.3	502.6	491.1
Long-term	262.6	262.2	89.5	85.0	—	—	25.0	21.7	1.5	—	378.6	368.9
(*b*) 1906–63	81.5	77.1	84.3	32.8	7.0	2.9	2.4	0.9	26.6	24.8	201.8	138.5
Long-term	48.5	47.8	52.1	9.6	—	—	—	—	—	—	100.6	57.4
Total	618.5	567.6	620.5	319.1	7.1	3.0	61.8	44.3	40.4	37.1	1,348.3	971.1
(*a*) Prior to 1960	488.3	485.3	239.2	233.2	0.1	0.1	50.2	43.4	13.8	12.3	791.6	774.3
Long-term	389.5	388.0	162.9	157.2	—	—	50.2	43.4	1.5	—	604.1	588.6
(*b*) 1960–63	130.2	82.3	381.3	85.9	7.0	2.9	11.6	0.9	26.6	24.8	556.7	196.8
Long-term	97.2	53.0	338.8	59.6	—	—	9.2	—	—	—	445.2	112.6

SOURCES: Annual reports of the credit institutions concerned.

[a] Loans authorized and in effect, at 30 June 1963 for IBRD and IDA; at 31 December 1963 for IDB, and at 31 January 1964 for the Eximbank. Loans for periods of over ten years are regarded as long-term loans.

(*d*) The formulation of initial programmes has encouraged some countries to undertake a series of basic studies and research never previously attempted, in such fields as the elimination of branch railway lines, improvement of basic statistics and data, institutional problems and questions of transport co-ordination and regulation;

(*e*) For understandable reasons, little specific attention has been paid so far to the transport problems and requirements that may arise from regional economic integration, a factor which will have to be taken increasingly into consideration in new programmes, or when existing programmes are revised.

2. EXTERNAL FINANCING

In relation to the need to improve and expand Latin America's means of transport, external assistance has, for a number of reasons, become a particularly important factor. The total investment required is wholly out of line, in the first place, with the difficulty of mobilizing increased internal resources, particularly in the case of projects which will not yield a return on investment for a considerable period of time, and activities with a high capital coefficient. Owing to their operational deficits, the railway systems cannot afford to replace and improve equipment and track on their own account; similarly, expansion and improvement of road networks depends, in most countries, almost entirely on the possibility of government financing. Lastly, investment in transport, particularly if equipment has to be added to or replaced, usually involves a high import content, so that its feasibility depends not only on the mobilization of domestic financial resources, but also upon the evolution of the capacity to import and on the balance-of-payments position.

In attempting to meet requirements, the Latin American countries have received substantial, albeit still inadequate, assistance from international credit agencies, from some countries outside the region and from suppliers of equipment and material. Such assistance has been chiefly designed to facilitate the financing of foreign exchange investment, although more recently some financing institutions have also made provision for investment in local currency.

Table 98 contains a summary of the loans granted to Latin America by four credit agencies—IBRD, its subsidiary the International Development Association (IDA), the Inter-American Development Bank (IDB) and the Export-Import Bank—as at the middle or end of 1963. The total amounts of these loans give some idea of the substantial contribution made by external aid to the financing of transport projects and purchases, particularly if it is remembered that other sources and forms of external financing exist, although they are not included in the table for lack of sufficient data.[11]

From the end of the Second World War until 1960 the four agencies mentioned above granted Latin America loans to the amount of 792 million dollars, of which 604 million represented loans to be repaid over periods of more than ten years. In the four-year period 1960–63, 557 million dollars' worth of loans were granted, of which 445 million were for loans repayable in over ten years.

Most of the funds were earmarked for roads and railways, only a small share (about 5 per cent) going to ports and harbours. Modest amounts were also invested in civil aviation, and a very little—on a short-term basis—in the purchase of motor vehicles. No credits at all were allocated to shipping.

Railway loans were granted—principally to Mexico and Brazil, and also, though on a smaller scale, to Argentina, Chile and Colombia—before 1960 in the main. Lately the trend has veered sharply towards loans for highway projects, but this development is not properly reflected in the figures given in table 98, since they do not include a series of highway loans granted in 1960–63 and amounting to about 170 million dollars.[12] Moreover, note should be taken of the liberal loans which the International Development Association (IDA) and the Agency for International Development (AID) have begun to grant in recent years. This shift in the destination of the loans, away from the railways, which may be attributable to the difficulty of presenting projects, on account of a combination of economic, social, labour and even political factors, makes it even harder to meet the urgent need to solve some of the major problems confronting the railways.

It should be noted that the loans issued before 1960 have been used up virtually in their entirety, while advantage has so far been taken of only 35 per cent of the loans granted between 1960 and 1963 (no more than 25 per cent in the case of long-term credits). Although the execution of infrastructure projects usually takes a good deal of time to complete, failure of the countries concerned to make full and speedy use of the funds assigned them may also be due to certain operational deficiencies.

Table 99.—Latin America: External loans for the transport sector
(*Millions of dollars*)

Country	*Prior to 1960*		*1960–1963*	
	Granted	*Taken up*	*Granted*	*Taken up*
Argentina	87.8	86.0	68.9	28.3
Bolivia	33.4	33.4	0.1	—
Brazil	214.5	210.8	33.6	33.6
Chile	4.2	2.7	45.2	24.7
Colombia	88.3	87.2	94.4	25.4
Costa Rica	21.5	20.0	14.2	2.6
Cuba	0.1	0.1		
Dominican Republic	—	—	4.0	—
Ecuador	54.7	54.5	0.2	0.2
El Salvador	16.1	15.5	11.8	2.1
Guatemala	18.2	18.2	11.0	3.1
Haiti	2.6	2.6	0.4	0.3
Honduras	11.3	10.8	12.8	3.3
Mexico	191.2	191.2	97.7	46.7
Nicaragua	12.2	11.9	2.0	2.0
Panama	18.9	16.2	9.0	5.6
Paraguay	1.1	1.1	6.0	0.1
Peru	15.5	12.1	59.2	12.0
Uruguay	—	—	22.6	—
Venezuela	—	—	63.6	6.8

Note: Source and notes as for Table 98.

Table 99 shows, for each Latin American country, the sums represented by the external loans granted and used from 1960 to 1963, in comparison with the figures for the period prior to 1960.

3. THE FINANCIAL POSITION OF THE RAILWAY SYSTEMS

The move towards integrated programming of the transport sector and proper channelling of internal and external resources may well make a significant contribution towards solving one of the most vexing problems in the field of transport today: that of the heavy operational losses suffered by most of the Latin American railway systems.

This problem, though not of recent origin, has become more serious in the past few years, as will be seen from the data in tables 100 and 101. Its aggravation is imputable to the structural changes that have taken place in traffic as a whole, as well as to the serious technical and operational shortcomings of railway transport, and its low productivity. The consequences not only affect the railway companies themselves, but can also be seen in the financial situation of the countries concerned and even in the inflationary pressures to which these are subject in varying degree.

In three of the seven countries included in the above-mentioned tables (Colombia, Mexico and Peru) the receipts of the railways virtually balanced expenditure in 1950; at present, in contrast, their operation coefficients—defined as the ratio between the railway companies' income and expenditure—are over 125. In the other four countries (Argentina, Brazil, Chile and

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[11] Loans extant as at the dates given do not include those already fully amortized, although the amounts involved do not appear to be very large. Nor were data available on direct loans by some European Governments and on medium-term financing by suppliers of equipment and material.

[12] Data have been compiled from several publications on the following loans granted for highway and road projects:

Country	*Source*	*Amount of loan (millions of dollars)*
Argentina	AID and IBRD	30.5
Bolivia	AID	7.2
Brazil	AID	12.5
Ecuador	AID	2.7
Honduras	AID	9.0
Mexico	IBRD	40.0
	AID	22.0
	IDB	30.5
Peru	AID and Eximbank	15.7
Venezuela	IDB	12.7

Table 100. Latin America: Operation coefficient (A) and ratio of railway deficit to budget deficit (B) in seven countries

Year	*Argentina*		*Brazil*		*Chile*		*Colombia*		*Mexico*		*Peru*		*Uruguay*	
	(A)	*(B)*	*(A)*	*(B)*	*(A)*	*(B)*	*(A)*	*(B)*	*(A)*	*(B)*	*(A)*	*(B)*	*(A)*	*(B)*
1950	123.8	...	136.0		136.9		103.2		101.9	...	104.2	...	134.6	...
1960	156.9	...	192.0	28.0	153.6	29.8	112.7	2.7	116.2	...	111.0	...	187.9	...
1961	174.0	...	228.0	29.8	179.0	42.1	112.4	2.3	128.5	...	120.9	...	228.3	...
1962	207.0	...	260.1	...	203.2	...	126.0	4.3	133.8	...	124.1	5.7	253.4	...
1963[a]		...	287.0	...	...	...	...	...	...	...	129.0	...	247.2	...

SOURCE: Railway statistics.

[a] Estimates.

Table 101. Latin America: Composition of railway receipts and expenditure in seven countries

(*Millions of national currency units at current prices*)

		Argentina	*Brazil*	*Chile*	*Colombia*	*Mexico*	*Peru*	*Uruguay*
1950	*Total receipts*	1,791	4,199	3,092	62	810	120	
	Percentage from:							
	Freight	62	69	69				
	Passenger traffic	29	23	28				
	Miscellaneous	9	8	3				
	Total expenditure	2,217	5,711	4,235	64	825	125	
	Percentage on:							
	Staff	77	59	66	53	61		
	Fuel	11	18	...	...	8		
	Miscellaneous	12	23	...	...	31		
	Deficit	426	1,512	1,142	2	15	5	
1960	*Total receipts*	17,051	23,348	78,858	102	1,866	347	83
	Percentage from:							
	Freight	67	62	71	78	81	82	73
	Passenger traffic	23	20	24	14	9	13	27
	Miscellaneous	10	18	5	8	10	5	—
	Total expenditure	26,749	44,833	121,147	115	2,169	385	156
	Percentage on:							
	Staff	71	65		55	45		67
	Fuel	13	11		...	6		6
	Miscellaneous	16	24		...	49		27
	Deficit	9,698	21,485	42,289	13	303	38	73
1961	*Total receipts*	17,631	31,992	74,237	113	1,795	354	92
	Percentage from:							
	Freight	66	62	70	74	81	82	71
	Passenger traffic	24	21	25	16	10	13	29
	Miscellaneous	10	17	5	10	9	5	—
	Total expenditure	30,677	72,935	132,885	127	2,307	428	210
	Percentage on:							
	Staff	69	71		62	49		73
	Fuel	13	...		...	6		4
	Miscellaneous	18	...		...	45		23
	Deficit	13,046	40,943	58,648	14	512	74	118
1962	*Total receipts*	15,190	49,261	84,029	146	1,795	361	103
	Percentage from:							
	Freight	69	64		78	80	81	64
	Passenger traffic	24	20		14	10	13	36
	Miscellaneous	7	16		8	10	6	—
	Total expenditure	31,443	128,138	170,738	184	2,401	448	261
	Percentage on:							
	Staff	...	73		59	48	...	74
	Fuel	...	...		...	...	12	5
	Miscellaneous	...	...		...	...	...	21
	Deficit	16,253	78,877	86,709	38	606	85	158

SOURCE: Railway statistics of the various countries.

Uruguay), these coefficients are still higher, in several even exceeding 200. According to recent data, the cases deficit registered by the Argentine railways was at least twice as high in 1963, at current values, as in 1962. Thus, with few exceptions, the operation coefficients of the Latin American railways are today the highest in the world.

It may be added that the coefficients in question are in fact even higher than they appear, since in a number of cases operating expenses do not include proper accounting entries for depreciation of infrastructure and equipment and for financial services (interest and amortization payments on loans or credit), and the amounts spent on maintenance and conservation often fall short of normal requirements. Another point to be noted is that annual and short-term fluctuations in the deficit are not necessarily due to a real aggravation of the problem, but sometimes to long delays in adjusting fares in the light of increases in operating costs, particularly wages.

A few significant conclusions may also be drawn from the composition of income and expenditure (see again table 101) in the different systems. A major share of income is clearly produced by goods traffic, which seems to be the case practically all over the world. The proportions vary from 62 per cent of total income in Brazil (1961) to 82 per cent in Peru (also in 1961). Receipts from passenger traffic range from 9 per cent of total income in Mexico (1960) to 36 per cent in Uruguay (1962). The rest includes all sorts of miscellaneous receipts, for instance from warehouses and a pipeline in Brazil—which raises the level of Brazilian income under this head above that of other countries—and the provision of such public service facilities as water supply, communications, etc.

In all the countries, with the single exception of Mexico in 1960, expenditure consists chiefly of staff costs; these alone often amount to more than total income. Expenditure on fuel ranges from a minimum of 4 per cent in Uruguay (1961) to a maximum of 13 per cent in Argentina (1961), incidence of this item naturally depending in part on the setting of price ceilings for fuel in the countries concerned.

The item "miscellaneous expenditure" covers sundry equipment, financial services, etc., and ranges from 16 per cent in Argentina (1960) to 49 per cent in Mexico (also in 1960), a surprisingly high figure which can only be explained by the use of different accounting methods in respect of the classification of expenditure.

It is therefore understandable that the size of railway deficits and their persistent increase should be a source of considerable anxiety to the Latin American Governments. The matter has been the subject of a good many studies and reports, including those of a number of missions of IBRD consultants. However, no positive results have as yet been achieved, owing to the complexity and diversity of the technical and economic factors influencing the deficit (analysis of which is beyond the scope of the present essentially descriptive report), and, even more, on account of the political and social content of the whole question. Apart from its significant internal aspects connected with the technical and operational obsolescence of the railways and their low productivity, the problem is obviously one of key importance in Latin America in relation to general policy for the development and co-ordination of transport as a whole.

Chapter VI

ENERGY

A. GENERAL OBSERVATIONS

Broadly speaking, the rate of increase in Latin America's production and consumption of commercial energy (including electric energy) in recent years may be described as satisfactory. Even in countries in which economic activity fell off, the decline in the growth rates of electric power generation and fuel consumption was less intense.

Between 1958 and 1963 total energy consumption increased by 25–30 per cent and *per capita* consumption by 7 per cent, while the corresponding figures for electric energy were 25–40 per cent and 20 per cent respectively.

An examination of this line of development reveals a sharp difference between the rates for the energy sector as a whole and for electric energy; the growth rate of the latter was much more vigorous and increased throughout the world without producing any sign of saturation in demand. In the energy sector as a whole, on the other hand, there were two series of factors acting in antithesis. Some of them, such as changes in the industrial structure and increased urban concentration, encouraged consumption, but these were not very influential during the five-year period 1958–63, and were insufficient to offset fuel economies achieved through more efficient use and technical innovations. The total effect of the two series of factors was a relative decline in the growth rate of energy consumption, a development that is common to the whole world and has for many years been progressively reducing the relative volume of energy consumption in the more industrialized countries.

Latin America slightly improved its position in relation to the rest of the world with respect to energy consumption, but its share of the total did not exceed 3.5 per cent. As regards *per capita* consumption of all forms of energy, including hydrocarbons, its relative standing deteriorated. Unit consumption of electric energy remained at about the same level as before.

The statistical basis for the above conclusions is set forth in tables 102 and 103. These tables show the difference between the growth rates of commercial energy consumption and of electric energy generation (in *per capita* terms), and also make it clear that while the total input of commercial energy per unit of product remained more or less stationary, there was a rapid increase in the total input of electric energy, because of the greater degree of electrification in industrial activities and the private sector.

As regards the ratio of hydro to thermal generation of electric power, the coefficient was higher than unity in 1958 (thus reflecting the predominance of hydraulic energy sources which is characteristic of the region as a whole), but declined by 15 per cent between that year and 1963, thus falling below unity (see again table 102). This is a temporary phenomenon, due mainly to the fact that, as a result of lack of foresight in studying and working out projects for hydroelectric plants, and of the longer period needed for their construction in comparison with thermal plants, power requirements had to be met by thermal plants, even where that was not the best solution.

Table 102. Latin America: Energy inputs in relation to the product

Year	*Ratio of hydroelectric generation to thermal generation*	*Electric energy generation per unit of product (kWh/dollar)*	*Total consumption of commercial energy per unit of product (kg of petroleum equivalent/dollar)*
1958 .	1.17	0.78	1.15
1959 .	1.11	0.82	1.15
1960 .	1.03	0.84	1.15
1961 .	0.94	0.86	1.15
1962 .	0.96	0.90	1.15
1963 .	0.97	0.96	1.2

There are indications that this tendency is waning and that within the next five years it will be possible to restore the proportion that prevailed up to 1958. There is every likelihood that the ratio of hydro to thermal generation could be increased considerably without any departure from the optimum ratio for the two sources of power.

Tables 104 and 105 show the evolution of energy consumption in Latin America in 1958–63, in terms of its total volume and main components. Coal will be seen to account for the same volume in absolute terms, although its contribution to the total decreased, whereas the share of hydro power remained much the same.[1]

The most interesting development was in hydrocarbons, which include petroleum products and natural gas. These two groups together maintained their share of the total at about 80 per cent, with a slight tendency towards an increase; in other words, they accounted for a very high proportion of all energy. But the great change was the marked increase in the share of natural gas, which replaced other fuels, in particular fuel oil, but also coal gas, kerosene and other petroleum products. Thus, whereas the relative share of petroleum products declined, there was an expansion of 50 per cent in that of natural gas, which reflected an almost twofold increase in the quantum of consumption between 1958 and 1963.

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[1] As a result of conversion certain distortions are introduced into the calculation of the share of hydroelectric power in Latin America's energy total. There are only two ways of calculating an equivalent value for hydroelectricity for inclusion in a general table. The first is to use the theoretical caloric equivalent of 860 calories per kWh, which is far from representing the share of electric power in consumption. The second is to use the actual thermal cost in thermal generation, as has been done in table 103. Although the second method is better than the first, it tends to make the share of hydro power seem smaller as the efficiency of thermal generation improves; this has occurred in the past five years in Latin America and will do so even more in future. In actual fact the growth rate of the volume of hydroelectric kWh has been similar to that of the consumption of all types of energy.

Table 103. Latin America: *Per capita* energy consumption

Year	*Electric energy (kWh)*	*Total commercial energy (kg of petroleum equivalent)*
1958 . .	295	430
1959 . .	305	435
1960 . .	325	440
1961 . .	340	450
1962 . .	355	460
1963 . .	370	465

This, too, was a world-wide change, being particularly marked in the United States and in certain parts of Europe. In the past the structure of consumption in Latin America has always been very different from that in the rest of the world. Coal has never played a very important part there, mainly because few Latin American countries have coal resources, and when they do, the coal is not of the best grade or does not have good coking qualities and supplies therefore have to be imported. Moreover, large-scale industrial and urban consumption in Latin America started at a time when its abundant hydrocarbon resources were already being used in preference to coal. In the United States and Europe, on the other hand, coal was the principal fuel from the beginning of the industrial era. Consequently, despite the progress of hydrocarbons in the last twenty-five years, in 1958–59 coal still represented over 53 per cent of total world consumption of commercial energy compared with only 44 per cent for petroleum products and natural gas.

By 1962–63 the share of coal had fallen to about 50 per cent of the total and the share of hydrocarbons was about the same. This is a historic moment in the evolution of energy sources; the moment at which coal is beginning to lose its centuries-old predominance in the world fuel supply. This phenomenon is naturally reflected in very different growth rates in recent years; whereas coal consumption rose by 10 per cent in absolute terms, hydrocarbon consumption rose by 25 per cent. Presumably in the rest of the world, as in Latin America, the quantum of coal consumption will remain stationary or tend to decline slightly, whereas the consumption of other types of energy (including nuclear energy, which is directly competing with coal in the generation of base energy) will climb rapidly.

Coal consumption expanded by barely 7 per cent between 1958 and 1963 in Latin America compared with an increase of 30 per cent for hydrocarbons and 25 per cent for energy of all kinds. For reasons of price, efficiency and convenience, coal is being replaced rapidly and increasingly in its traditional uses (railway transport, thermal power plants, and even for certain kinds of industrial and household consumption). The fact that there has continued to be a slight increase instead of a decline is partly due to its consumption in sectors where it is practically irreplaceable, such as the expanding steel industry in various Latin American countries. Even so, the fall in consumption could have assumed catastrophic

Table 104. Latin America: Total consumption of commercial energy

(*Millions of tons of petroleum equivalent*)

	1958	*1959*	*1960*	*1961*	*1962*	*1963*
Solid fuels . .	6	6	6	6	6	6
Petroleum products	58	60	63	66	68	70
Natural gas . .	8	9	9	11	13	15
Hydroelectricity[a] .	11	12	12	12	13	13
TOTAL	83	87	90	95	100	104

[a] The petroleum equivalent was calculated on the basis of the unit consumption for thermal power, which was 4,000 calories per kWh (or slightly more) in 1958–59, and 3,000 per kWh in 1962–63, as a result of the entry into operation of some large modern thermoelectric plants.

Table 105. Latin America: Composition of commercial energy consumption

(*Percentage*)[a]

	1958	*1959*	*1960*	*1961*	*1962*	*1963*
Solid fuels . .	7.5	7.0	6.5	6.5	6.0	6.0
Petroleum products	70.0	69.0	70.0	69.5	68.0	67.0
Natural gas . .	9.5	10.5	10.0	11.5	13.0	14.5
Hydroelectricity .	13.0	13.5	13.5	12.5	13.0	12.5

[a] Rounded.

proportions if it had not been for the protection given as a policy measure by the Governments of producer countries in Latin America for reasons connected with the social situation and foreign exchange availabilities.

The five main coal-consuming countries of Latin America are, in descending order, Colombia, Chile, Brazil, Mexico and Argentina. Between them they account for almost all consumption of this fuel and are relying to an increasing extent on domestic supplies. Consequently the import coefficient for coal fell from 35 per cent in 1958–59 to 20 per cent in 1962–63.

As regards hydrocarbons, the progress made by natural gas, chiefly at the expense of petroleum products, was aided by large-scale projects for conveying the gas from the deposits to the main consumer centres, usually over great distances. This trend is mainly to be seen in Argentina, Mexico and Venezuela, although it can also be found to a lesser extent in other Latin American countries. Pipelines under construction or projected will make it possible to reduce considerably the volume of natural gas now lost in production areas because there is no way of conveying it to the consumer centres.

Imports of petroleum and petroleum products declined in some countries (such as Argentina and Chile), while in others (such as Brazil) the increases in domestic production were not sufficient to meet internal demand and imports had to be stepped up. This trend was naturally more marked in the non-producer countries, such as Uruguay, the Central American countries and part of the West Indies. A notable expansion also took place in domestic refining, and has led to an increase in imports of crude and a decrease in imports of petroleum products.

Immediate prospects are encouraging. A large number of new hydroelectric plants are being built, planned or studied, while there is an increase in interconnexions between different countries or areas. Due regard is also being paid to thermal capacity, and some nuclear plants are under study. As regards petroleum, the rate of exploration and prospecting is perhaps not as high as is desirable in all countries, and there is consequently some risk that the ratio of reserves to production will drop dangerously low in the not too distant future. However, more intensive studies in zones that have already been surveyed may result in an increase in proved reserves. Geophysical prospecting in terms of crew/months declined by 25 per cent but the reduction in the area covered may not have been quite as much, while the level for exploratory wells sunk was about the same as at the beginning of the period, although tending to fluctuate sharply and to decline.

Another point worth noting is the share of the public sector in activities relating to energy and in the financing of the works involved. Three basic and distinct aspects are concerned: (*a*) planning, (*b*) state ownership and (*c*) public financing.

Some progress was made in planning in 1958–63, but of rather a special kind. Unlike many other sectors of economic activity, the energy sector, especially the electric power branch, had already taken certain steps towards a commendable unification of planning criteria in the preceding decade. Most Latin American countries prepared electrification plans or programmes to one extent or another—sometimes of a very exact and detailed kind—and the same may also be said of the petroleum industry in certain countries. The main new departure in 1958–63 was the formulation of general development plans, which incorporated plans for the energy sector, with all the necessary modifications for this integrated approach. From the broader standpoint of orientation rather than planning in the strict sense, some countries aimed at drawing up a general balance sheet for all forms of energy, by origin and destination, in order to determine the most advantageous forms of development. In the petroleum sector planning continued on the lines already established, even in countries where state action predominates, and there was relatively little co-ordination with general or sectoral targets.

As regards state ownership, the direct participation of the public sector in energy production was very extensive in Cuba and Mexico, where the State is now practically the sole owner of the means of production in this field. In Argentina the first steps were taken to transfer the main electricity enterprise (previously under joint private and state ownership) to full government ownership, while in Colombia the principal electricity enterprise was purchased by the State, and in Brazil negotiations were begun for the purchase of the second most important enterprise.

In the petroleum sector government bodies continued to expand in countries where they already existed, while in other countries (e.g., Venezuela) a national company was established, and in Peru steps were taken to revise the contract with the main private petroleum company. At the same time there was an increase in the participation of private enterprises in Argentina, although at the close of 1963 the contracts concerned were revoked with a view to revising some of them. By the end of the period under review the share of government enterprises in petroleum production in Latin America had risen to 20 per cent of the total (70 per cent with Venezuela excluded), whereas in electric power generation the proportion was much higher, being in the region of 70 per cent.

As regards public financing, there was heavy investment, but private investment was also substantial, especially in the petroleum sector. During the period under consideration large sums were invested in the energy sector (mainly in electric energy), and large hydroelectric projects were launched, many for multiple use. In the petroleum sector prospecting and drilling did not maintain a high growth rate in Latin America as a whole, but there was a marked increase in certain countries. Larger sums were invested in refining and in land transport by pipeline. In 1959–63 net public and private investment in the sector as a whole was equivalent to 7,000 million dollars, of which 3,000 million represented works for generating and distributing electric power, and 4,000 million petroleum investment.

Total gross investment in Latin America in 1958–63 amounted to about 72,000 million dollars and net investment to about 55,000 or 60,000 million. Thus investment in the energy sector constituted about 12 per cent of the total, with electric energy accounting for 5 per cent and petroleum for 7 per cent. Although the figure of 12 per cent signifies that the capital invested was too little to maintain a high degree of activity in the energy sector, it was an improvement upon the level in the previous decade.

As a very tentative estimate for the sector as a whole it may be assumed that 55–60 per cent of the funds in question came from domestic sources and 40–45 per cent from external sources. In the electric energy sector the corresponding percentages were 65–70 and 30–35, respectively, the external capital consisting mainly of loans from international bodies.

This trend seems likely to continue over the short and medium term, and may even intensify in the electric energy sector (particularly as regards hydro power). The petroleum industry, on the other hand, will undoubtedly evolve in a very different way. In recent years special attention has been devoted to refining and internal transport, with a view to reducing imports of petroleumproducts. As a result refining capacity is now almost enough to meet the demand of the main consumer centres, and future additions will not involve more than a relatively modest level of investment.

Lastly, the prospects for world demand weighed in conjunction with the rapid progress being made by other producer and exporter areas offer scant hopes of an increase in the growth rate of production in the main exporting countries of Latin America.

B. ELECTRIC ENERGY

1. EVOLUTION OF THE ELECTRIC ENERGY SECTOR: SALIENT FEATURES

(a) *Installed capacity and energy generation during the period under review*

In 1963 the electric energy generated in Latin America amounted to 85.7 TWh[2] and the population was estimated at 225 million. *Per capita* generation was therefore 381 kWh, as against 307 in 1959, which is equivalent to an annual growth rate of 5.5 per cent. This was less than the annual rate of 6.3 per cent prevailing in the fifties.[3]

As may be logically assumed, this reduction in the growth rate of electric energy production per head accompanied a similar trend in the evolution of Latin America's gross domestic product. While *per capita* production of goods and services increased at the rate of 2.0 per cent between 1950 and 1959, it did so at only 1.3 per cent in the four years from 1959 to 1963. In common with all the other economic indexes, electric energy production bears witness to the stagnation which may be said—on an average, since there are great disparities between the different countries—to have been the salient feature of the last few years.[4]

Consequently, the rate of electrification of the economy —which is defined here as the difference between the respective growth rates of electric energy generation and the gross domestic product—was 4.2 per cent in 1959–63, i.e., slightly below the level of 4.3 per cent reached in the fifties. It derives from the action of different variables which result in a more intensive use of electric energy per unit of product, namely, the rate of industrialization, the pace of the urbanization process and the tempo at which technological innovations and improvements in productivity are made in the producer enterprises and consumer units.

Table 106 gives the figures for electric energy generation and the gross domestic product during the years 1958 to 1963. The electric energy generated per unit of product is calculated from these figures, and is seen to have risen steadily from 0.55 kWh per dollar in 1950 to 0.96 per dollar in 1963.

Table 106. Latin America: Production of electric energy and total production of goods and services[a]

Year	Electric energy generated (TWh, or 10^9 kWh)	Gross domestic product (10^9 dollars at 1960 prices)	Electric energy generated per unit of product (kWh per dollar)
1950	27.0	49.2	0.55
1954	37.6	59.2	0.64
1955	42.4	63.0	0.67
1956	47.0	65.4	0.72
1957	51.0	69.6	0.73
1958	56.8	72.7	0.78
1959	61.4	74.8	0.82
1960	66.3	79.1	0.84
1961	71.8	83.1	0.86
1962[b]	77.8	86.0	0.90
1963[b]	84.7	87.9	0.96

SOURCES: Gross domestic product: ECLA, on the basis of official statistics. Electric energy generated: *Revista latinoamericana de electricidad*, No. 1, Santiago, third quarter of 1963, pp. 113–114.

[a] Excluding British Guiana, Jamaica, Surinam, Trinidad and other countries.

[b] The figures for 1962 and 1963 are provisional and subject to adjustment in subsequent publications.

Table 107 shows the place occupied by Latin America in a table of electric energy consumption per head. One of the important facts to emerge from this table is that the region's average consumption amounts to less than half the world average and less than one-tenth of the United States average.

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[2] 1 TWh = 1,000 million kWh.

[3] The regional figures for generation and installed capacity in 1963 were based on estimates for the five principal countries (Argentina, Brazil, Chile, Mexico and Venezuela), which represent 82 per cent of the region's total installed capacity. If the trend for all the rest of the countries is combined with that of the above-mentioned group, the resulting absolute error will be less than one fifth in terms of the figures for Latin America as a whole. To this should of course be added the probable margin of error in the estimates for the principal countries. From an over-all analysis of these variables it is estimated that the probable relative error in the regional figures for 1963 will not exceed 1.5 per cent.

[4] In order to point up the unsatisfactory nature of recent evolution, suffice it to recall that in the document entitled *La expansión del sector eléctrico en América Latina y sus necesidades de capital para 1960–70* (ST/ECLA/Conf. 7/L.1.11), presented at the Mexico Seminar in August 1961, projections of electric energy generation for 1965 envisaged a limited range of 94.6 to 123.8 TWh. Should the recent trend continue, 97.5 TWh would be generated in 1965, that is, very little more than what was considered in 1960 to be the very minimum or most pessimistic hypothesis of electric energy development.

As in the case of all regional economic indicators, Latin America's average output of electric energy obviously conceals marked differences between one country and another. A careful analysis of such differences can be made from table 108, which shows the evolution of *per capita* generation in 1950 and 1958–63 on a country-by-country basis. Table 108 indicates that there are great disparities between the figures for *per capita* electric energy production; this is of course not simply the outcome of recent developments, but the continuation of an old trend. For example, in 1962, a year for which data are obtainable in nearly all the Latin American countries, the range of figures is very wide, starting from an estimated 25 kWh for Haiti and ending with 745 kWh for Venezuela. The regional average for that year—359 kWh—was exceeded by five countries besides Venezuela, namely, Argentina (547 kWh), Brazil (364 kWh), Chile (661 kWh), Costa Rica (378 kWh) and Uruguay (583 kWh). Mexico was close to the average, with 325 kWh, while five other countries—Ecuador, Guatemala, Haiti, Honduras and Paraguay—had less than 100 kWh per head.

Table 107. Total electric energy consumption, 1961
(*KWh* per capita)

Country or region	*Consumption*
Norway	9,256
Canada	6,208
Sweden	4,864
United States	4,801
Switzerland	3,967
United Kingdom	2,623
Federal Republic of Germany	2,071
France	1,604
Soviet Union	1,421
Japan	1,330
Italy	1,214
Poland	984
Spain	680
Latin America	282
World average	784

SOURCES: Union Internationale des Producteurs et Distributeurs d'Energie (UNIPEDE) and ECLA.

Table 108. Latin America: *Per capita* generation of electric energy
(*KWh*)

Country	*1950*	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*
Argentina	308	466	463	498	542	547	555
Bolivia	...	114	126	126	128	133	(133)
Brazil	157	299	310	325	337	364	(385)
Chile	482	568	614	604	626	661	(701)
Colombia	108	209	226	253	(264)	(284)	(308)
Ecuador	48	81	83	90	95	98	(99)
Paraguay	29	48	51	50	(53)	(53)	(55)
Peru	112	209	219	264	266	273	(314)
Uruguay	274	504	470	498	559	583	(615)
Venezuela	242	558	608	637	686	745	(803)
Costa Rica	228	332	322	366	362	378	367
Cuba	235	398	419	398	377	...	...
Dominican Republic	...	101	109	117	(122)	(125)	(124)
El Salvador	46	93	98	107	109	116	124
Guatemala	41	63	66	74	75	81	89
Haiti	...	22	22	22	24	...	...
Honduras	36	44	46	49	51	51	54
Mexico	168	270	281	298	316	325	344
Nicaragua	81	107	124	117	119	131	154
Panama	...	209	232	22	235	295	316
British Guiana	88	113	127	159	206	(217)	(240)
Jamaica	(103)	270	285	316	362	396	426
Surinam	164	242	270	296	318	342	(353)
Trinidad and Tobago	(397)	545	550	559	575	633	(670)
Latin America	177	293	307	324	342	359	381

Note: The figures in parentheses are provisional.

In addition to the absolute figures for installed capacity and energy generation and their relation to the population, it is also interesting to note the growth rates of the first two variables in the different countries. Table 109, which covers most of the Latin American countries, has been prepared for that purpose. The main conclusion to be drawn from this table is that, in the majority of cases—and particularly in the countries with the greatest economic potential—installed capacity has increased more rapidly than generation. This is attributable, first, to the capacity deficit at the end of the fifties which reduced margins of reserve to little or nothing and led to restrictions on consumption; as a result, the logical outcome was that national plans for expansion, whether of the whole system or one enterprise, should make provision for increasing such margins. Secondly, it was due to the fact that the plans in question were based on hypotheses of economic growth that were never fulfilled, and that electric energy demand therefore increased more slowly than had been anticipated. In other words, the moderately satisfactory implementation of plans to expand capacity has given rise to a partly deliberate and partly involuntary increase in the margins of reserve, involuntary because of the slowing down of economic development in general. However, the increase is, in itself, a favourable sign, and efforts should be made to maintain the upward trend since, although the existence of a supply of electric energy cannot gurantee an equal volume of demand, the lack of supplies might prove a serious impediment to the development of production and the improvement of living levels, as it has so often been in Latin America in the past.

Table 109. Latin America: Growth rate of installed capacity and of electric energy generation in selected countries

(Annual cumulative percentages)

Country	*Installed capacity*	*Generation*
Argentina	7.8	6.6
Bolivia	5.1	4.2
Brazil	11.6	8.8
Chile	6.3	4.8
Ecuador	14.7	8.9
Peru	6.8	12.1
Uruguay	7.0	8.9
Venezuela	19.0	10.8
Costa Rica	7.9	7.3
El Salvador	9.1	9.2
Guatemala	5.5	10.6
Honduras	5.2	7.9
Mexico	11.5	8.8
Nicaragua	0	9.0
Panama	8.5	10.7

Note: Where there were no reliable data for 1963, the average rate for 1959–62 was taken. If there was no information for 1962 either, the rate was omitted.

Substantial increases in the rates, which have made the cost of the service more onerous in real terms, have also had the effect of retarding the growth of consumption, and consequently of generation, in the period under review. An analysis will be made later of some aspects of the increases that have given enterprises greater financial stability. The effect of a rise in rates is known to last for only one or two years, at the end of which time the consumer has become used to the new price and resumes his normal purchasing pattern. This is another reason for hoping that in the next few years electric energy consumption will regain, or even exceed, the growth rate it attained in the past decade, and explains why it would be wrong for the Latin American planner or entrepreneur to be guided unduly by the course of events over the last four years and to count on the margin of idle capacity available at present.

With further reference to table 109, it is interesting to note that the Central American countries constitute an exception to the trends described above. In that area generation increased more rapidly than capacity because, in contrast to the situation in South America, there was no shortage of capacity at the end of the past decade to necessitate large-scale expansion. However, as will be seen later, some important projects are under construction, and it may therefore be assumed that Central

Table 110. Latin America: Total installed capacity

(MW on 31 December each year)

Country	*1959*	*1960*	*1961*	*1962*	*1963*
Argentina	3,166	3,474	3,721	3,966	(4,340)
Bolivia	125	137	(142)	145	(148)
Brazil	4,115	4,800	5,205	5,729	(6,200)
Chile	1,092	1,142	1,152	1,314	(1,380)
Colombia	890	915	(930)	(1,030)	(1,150)
Ecuador	106	111	(140)	160	(160)
Paraguay	30	30	(30)	(30)	(30)
Peru	746	779	870	911	972
Uruguay	332	435	435	435	435
Venezuela	1,144	1,214	1,870	1,930	(1,950)
Costa Rica	110	113	113	118	149
Cuba	932	...	...	...	...
Dominican Republic	98	(111)	(111)	(111)	(116)
El Salvador	74	74	89	90	105
Guatemala	72	73	85	87	89
Haiti	25	28	...	...	...
Honduras	31	33	35	38	38
Mexico	2,739	3,021	3,275	3,564	4,243
Nicaragua	75	76	75	74	74
Panama	60	63	75	81	83
British Guiana	40	52	52	...	...
Jamaica	146	150	168	...	...
Surinam	(30)	...	...	...	...
Trinidad and Tobago	109	109	109	...	...
Latin America	16,300	17,900	19,700	21,200	23,100

Note: The figures in parentheses are provisional.

Table 111. Latin America: Total electric energy generated
(*GWh, or millions of kWh*)

Country	*1959*	*1960*	*1961*	*1962*	*1963*
Argentina	9,545	10,458	11,548	11,874	12,300
Bolivia	456	465	487	517	(530)
Brazil	21,108	22,865	24,405	27,158	(29,500)
Chile	4,605	4,592	4,879	5,286	(5,750)
Colombia	3,390	3,920	(4,200)	(4,650)	(5,180)
Ecuador	349	389	(429)	451	(465)
Paraguay	87	90	(95)	(100)	(105)
Peru	2,172	(2,645)	2,777	2,896	3,422
Uruguay	1,176	1,244	1,395	1,515	(1,550)
Venezuela	4,315	4,652	5,217	5,882	(6,500)
Costa Rica	387	438	471	492	514
Cuba	2,806	2,710	2,600	...	...
Dominican Republic	316	350	(380)	(400)	(420)
El Salvador	235	256	273	302	334
Guatemala	243	281	291	324	364
Haiti	90	90	100	...	...
Honduras	87	97	102	108	118
Mexico	9,775	10,728	11,747	12,507	13,707
Nicaragua	174	175	179	209	246
Panama	232	244	258	325	348
British Guiana	70	90	120	...	...
Jamaica	450	510	590	(650)	(720)
Surinam	70	80	90	(105)	(120)
Trinidad and Tobago	450	470	500	564	619
Latin America	62,600	67,800	73,100	79,200	85,700

Note: The figures in parentheses are provisional.

Table 112. Latin America: Installed capacity in public utilities
(*MW on 31 December each year*)

Country	*1959*	*1960*	*1961*	*1962*	*1963*
Argentina	2,228	2,287	2,495	2,630	(3,000)
Bolivia	75	75	(79)	82	(84)
Brazil	3,215	3,783	4,164	4,535	(4,900)
Chile	599	599	602	754	(820)
Colombia	635	670	684	(780)	(880)
Ecuador	85	87	(109)	128	(128)
Paraguay	29	25	(29)	(29)	(29)
Peru	320	348	359	(393)	(420)
Uruguay	332	435	435	435	435
Venezuela	724	794	1,447	1,507	(1,520)
Costa Rica	99	100	99	106	136
Cuba	545	550	...	...	...
Dominican Republic	(62)	(75)	75	75	(80)
El Salvador	65	65	81	81	96
Guatemala	59	60	71	71	73
Haiti	12	13	...	...	...
Honduras	17	24	26	28	28
Mexico	2,093	2,308	2,435	2,724	3,369
Nicaragua	47	48	46	46	46
Panama	50	53	63	66	68
British Guiana	16	17	18	...	...
Surinam	13	(15)	(17)	(20)	(23)
Jamaica	64	68	86	...	...
Trinidad and Tobago	61	61	61	...	...
Latin America	11,500	12,600	14,000	15,300	16,900

Note: The figures in parentheses are provisional.

Table 113. Latin America: Electric energy generated by public utilities
(*GWh, or millions of kWh*)

Country	*1959*	*1960*	*1961*	*1962*	*1963*
Argentina	7,373	7,863	8,620	8,752	(9,130)
Bolivia	286	300	(330)	(350)	(360)
Brazil	16,619	18,514	20,318	22,625	(24,700)
Chile	2,258	2,342	2,551	2,804	3,165
Colombia	2,698	2,795	2,981	3,380	3,820
Ecuador	266	324	(364)	386	(395)
Paraguay	72	80	85	90	(95)
Peru	971	1,169	1,283	1,362	(1,670)
Uruguay	1,176	1,244	1,395	1,515	(1,550)
Venezuela	2,724	2,973	3,445	4,020	(4,500)
Costa Rica	361	412	442	468	486
Cuba	2,073	2,100	1,920	...	...
Dominican Republic	243	261	275	(285)	(300)
El Salvador	228	249	266	296	328
Guatemala	201	246	262	294	332
Haiti	52	58	60	...	...
Honduras	43	67	71	76	84
Mexico	7,840	8,589	9,447	10,112	11,111
Nicaragua	94	107	118	142	168
Panama	208	218	230	294	314
British Guiana	50	50	60	...	...
Jamaica	240	260	300	330	366
Surinam	30	40	50	(57)	(74)
Trinidad and Tobago	220	260	280	(330)	(390)
Latin America.	46,300	50,400	55,200	60,000	65,500

Note: The figures in parentheses are provisional.

America's installed capacity will increase considerably in the next few years.[5] In Uruguay, the high rate of increase in generation from 1959 to 1963 is accounted for by the abnormally low level of generation in 1959 as a result of floods.

Tables 110, 111, 112, 113 and 114 set forth the available data on the evolution of each country's installed capacity and energy generation, in aggregate terms and in relation to the public utilities.

(b) *Structure of electric energy demand and evolution of its principal components*

In order to analyse the evolution and structure of total electric energy demand, consumption has been divided into two basic components: *industrial consumption*, and *non-industrial urban consumption* (or, simply, *urban consumption*). The former represents demand in the manufacturing and mining sectors, while the latter covers all sources of demand for electric energy, other than the production sectors, in which electricity is a final consumer good or an input in a service benefiting the final consumer, that is, for households, commerce, transport and public lighting. Apart from the statistical difficulties involved in separating each of these items which are normally classified under different rates, it is justifiable on methodological grounds to group them together in the category termed urban consumption. They are all closely linked to the expansion of urban areas, and are therefore motivated by a common dynamic force which is largely independent of the dynamics of industrial demand.

Table 114. Latin America: Total electric energy generated
(*GWh, or millions of kWh*)

Country	*1955*	*1959*	*Rate of increase (percentage)*
Argentina	7,002	9,545	8.0
Bolivia	387	455	4.2
Brazil	13,655	21,108	11.6
Chile	3,866	4,605	4.4
Colombia	2,250	3,348	10.5
Ecuador	259	349	7.9
Paraguay	64	87	8.0
Peru[a]	1,363	2,011	10.1
Uruguay	993	1,102	2.5
Venezuela	2,388	4,315	16.0
Costa Rica	296	387	7.1
Cuba	1,842	2,806	11.2
Dominican Republic	195	316	12.9
El Salvador	144	235	13.0
Guatemala	165	243	10.1
Haiti	60	90	10.8
Honduras	65	87	7.6
Mexico	7,002	9,774	8.8
Nicaragua	124	174	8.9
Panama	134	232	14.8
Latin America	42,254	61,229	9.9

[a] 1954 and 1958.

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[5] Much the same may be said of Peru and Uruguay, which are the only South American countries where the relative evolution of electric energy capacity and production is similar to that in Central America.

Because of statistical difficulties, the analysis has been confined to the five leading countries of the region. This in no way detracts from the validity of the conclusions that may be reached, since, as already explained, those countries represent more than four-fifths of Latin America's total installed capacity and electric energy generation.

Table 115. **Latin America: Evolution of electric energy consumption and of its principal components in five countries**
(*GWh*)

Country	*1949*	*1959*	*1962*
Argentina			
Industrial consumption .	2,412	4,761	5,214
Urban consumption .	1,869	3,464	5,285
Total consumption .	4,281	8,225	10,499
Generation . . .	4,979	9,545	11,874
Brazil			
Industrial consumption .	3,676	8,413	11,269
Urban consumption .	3,163	8,749	9,588
Total consumption .	6,839	17,162	20,857
Generation . . .	7,610	21,108	27,158
Chile			
Industrial consumption .	2,189	3,117	3,471
Urban consumption .	575	1,109	1,300
Total consumption .	2,764	4,226	4,771
Generation . . .	2,881	4,605	5,286
Mexico			
Industrial consumption .	2,217	4,890	6,245
Urban consumption .	1,604	3,770	4,451
Total consumption .	3,821	8,660	10,696
Generation . . .	4,328	9,775	12,507
Venezuela			
Industrial consumption .	707	2,524	2,924
Urban consumption .	228	1,401	2,025
Total consumption .	935	3,925	4,949
Generation . . .	1,011	4,315	5,882
Total for the five countries			
Industrial consumption .	11,201	23,705	29,123
Urban consumption .	7,439	18,493	22,649
Total consumption .	18,640	42,198	51,772
Generation . . .	20,809	49,348	62,707
Consumption/generation ratio (percentage) .	89.5	86.1	82.5

Table 115 shows the evolution of total electric energy consumption of its two basic components and of generation during the period 1949–62. Some of the interesting conclusions to emerge from this table are: (*a*) that consumption by the manufacturing and mining sectors continues to be the major component of total consumption, even though the share of urban consumption increased from 40 to 44 per cent in the thirteen years covered by the table; and (*b*) that the coefficient for the consumption-generation ratio, which had dropped in 1949–59, continued to fall in the last few years. With all due allowance for the negative effect of the trend towards closer interconnexion between producer and consumer centres and for the relative decrease in the importance of self-supplying, the decline in the coefficient indicates that Governments and concessionary enterprises are not sufficiently concerned with improving the distribution networks and thus reducing losses and unrecorded consumption.

Table 116 has been prepared with a view to relating the evoutlion of the two main components of electric energy consumption to the variables indicative of the expansion of those sectors whose needs they help to satisfy. It indicates the mean growth rates of those variables and of associated electric energy consumption in 1950–59 and 1959–63.

Table 116. **Latin America: Growth rate of electric energy demand and of the chief macro-economic variables related to it**
(*Annual cumulative percentages*)

	1950–59	*1959–63*
Total consumption of electric energy . .	8.5	7.1
Gross domestic product	4.4	4.2
Industrial consumption of electric energy .	7.8	7.1
Industrial production (manufacturing and mining)	6.0	5.5
Urban consumption of electric energy . .	9.5	7.0
Urban population	5.0	6.0

The figures in table 116 are further proof of the deterioration in the development process over the last few years. In the first place, the growth rates of production and consumption were less than in the previous decade. Another adverse sign is the reduction in the rate at which the sectors using electric energy were being electrified, i.e., the difference between the growth rate of urban electric energy consumption and of the urban population, on the one hand, and between the growth rate of industrial electric energy consumption and of industrial production, on the other. In the four years from 1959 to 1963 the electrification rates dropped to 1.6 and 1.0 per cent, respectively. For urban consumption, and its principal component, household consumption, this probably meant that the relevant increment in demand was extensive rather than intensive, that is, the number of consumers increased as a result of urban population growth, whereas average *per capita* consumption—which, as regards electric energy, is the yardstick of the average family's level of living—has not increased very much. The other hypothesis for this evolution is equally unfavourable, namely, that the increment in the average consumption of previous consumers was matched by a corresponding increase in the number of urban families with no electricity supply. Unfortunately, the unreliable nature of the statistics available makes it impossible to go into the question more thoroughly or to decide how far each of the factors has been responsible for reducing the *per capita* rate of increase of urban electric energy consumption, but it is at least plain that urbanization is not taking place in a well-balanced way.

As regards industry, the slow electrification rate bears witness to the far from rapid pace at which structural and technological changes are being introduced into the manufacturing sector; in other words, existing industry is not modernizing its plant or improving productivity as quickly as might be desired, nor is the production of intermediate and capital goods, whose manufacture requires a higher input of electricity per unit of value added, expanding at a satisfactory rate.

(c) *Structure of electric energy supply*

In contrast to the United States and Europe, Latin America is still far from reaching relative saturation in the use of its easily accessible and cheap hydroelectric potential. Hence the large share—which is likely to become even larger in future—maintained by hydroelectric power in the region's energy supply.

Table 117. Latin America: Total installed capacity
(*Millions of kW on 31 December each year*)

	1950	*1959*	*1963*
Hydraulic capacity	3.5	6.9	9.3
Thermal capacity	4.2	9.4	13.8
Total capacity	7.7	16.3	23.1
Hydraulic capacity as a percentage of the total	45.4	42.4	40.3

Table 117 shows the evolution of that share from 1950 to 1959 and from 1959 to 1963. Hydroelectric energy represents about 30 per cent of the world total. Its share is gradually shrinking, since the contraction in the more developed countries has not been fully offset by the construction of new hydroelectric plants in the less developed areas.

Table 118. Latin America: Total installed capacity in the public and private service in five countries

	Total capacity (MW)	*Public utilities (MW)*	*Share of the private sector (self-supply as percentage of total)*
Argentina			
1959	3,166	2,228	29.5
1963	4,340	3,000	30.9
Brazil			
1959	4,115	3,215	21.5
1963	6,200	4,900	21.0
Chile			
1959	1,092	599	45.0
1963	1,380	820	40.6
Mexico			
1959	2,739	2,093	23.6
1963	4,243	3,369	20.6
Venezuela			
1959	1,144	724	36.7
1963	1,950	1,520	22.0
Total			
1959	12,256	8,859	27.7
1963	18,113	13,609	24.9

The relative proportion of Latin America's hydraulic capacity is likely to increase in the future because large hydroelectric plants have been planned or are already being built. As regards the projects under way, it will be noted in section B.3 of this chapter that out of a total of 8.7 million kW in public utilities in process of construction or installation on 31 December 1963, 7.0 million, or 81 per cent, corresponded to hydroelectric plants, that is, slightly over the 1959 figure of about 70 per cent. Of course, the share of hydroelectric power in the capacity under construction will always be larger than its share in installed capacity, because a hydro plant takes approximately twice as long to build as a thermoelectric plant of equivalent size.

Another salient element in the structure of the electric energy supply is the important part played by self-supplying, i.e., the distinction between the public and private service, as shown in table 118.

The relative importance of self-supplying is declining, and is likely to do so even more in future as and when the public utilities are able to offer service that is satisfactory in both quantity and quality—something that for various reasons they have been unable to provide in the past. The natural exception will be industries that are far from generation and consumer centres, or, because of their technological level, find it cheaper to generate a part of or all the electric energy they require than to purchase it from the public utility enterprise.

2. Financial, legal and institutional questions

(a) *Financing of electric energy expansion*

Table 119 has been prepared on the basis of data obtained from Governments, development banks and the chief electricity enterprises in Latin America, as well as from international financing agencies. It shows the sources of the funds that have been used to finance the development of electric energy in the four years from December 1959 to December 1963.

Table 119. Latin America: Sources of funds invested in the electric energy sector[a]
(*Millions of dollars*)

	Value	*Percentage*
A. *External sources*		
1. International and United States Government financing agencies[b]	736	30
2. Suppliers' credit	189	8
Total, external sources	925	38
B. *Internal sources*		
1. Self-financing (profits, and taxes included in the rates)	1,025	43
2. Government contributions (Central Treasury and municipal funds, and development bank credit)	460	19
Total, internal sources	1,485	62
Total, estimated investment	2,410	100

[a] Funds accumulated between end December 1959 and end December 1963.

[b] The International Bank for Reconstruction and Development contributed 80 per cent of the sums provided by the agencies in question. The remainder consists of contributions from the Export-Import Bank, the Inter-American Development Bank and the Agency for International Development.

A few comments of a methodological nature are needed here to explain the bases used for working out table 119:

(i) In order to estimate the total amount invested in the electric energy sector, an analysis was made of the data available for the principal Latin American countries. The total amounts thus calculated were compared with the figures for the increase in installed capacity during the period under review and with the average cost per kW calculated in 1961 on the basis of national plans;[6]

(ii) The item "self-financing" includes the collection of taxes levied specifically on the electric energy consumer, the amount of which may, from an economic standpoint, be considered as an increase in the rate, provided the earnings therefrom are to be used for the expansion of the sector;

(iii) The item "Government contributions" includes direct contributions from the Treasuries of central Governments, funds from provincial and municipal governments and the income derived from "funds" or "revenue appropriations" for the development of electric energy, since it was deemed that such income could be included in the Government contributions charged to "general revenue". In other words, and with reference to point (ii), "Government contributions" are considered to cover all funds that are channelled into the electric energy sector without having been derived directly from it. For example, this item includes the expenditure of the Argentine Fondo Nacional de la Energía Eléctrica and Fondo Especial de Desarrollo Eléctrico del Interior, established by Act 15336, which, together with the contribution to Yacimientos Carboníferos Fiscales, constitute the main items of expenditure of the Fondo Nacional de la Energía, set up under the same Act and financed primarily by surcharges on liquid fuels. In the case of the Fondo Federal da Eletrificação in Brazil, it was necessary to differentiate between the Fund's share of the revenue accruing from the "single tax on electric energy" (created by Act 2308 of 31 August 1954 and amended by Act 4156 of 28 November 1962, which transformed it into an *ad valorem* tax in order to prevent the reduction of its real value through inflation) and the contributions made to the Fund under the head of revenue from customs duties and general consumption taxes. According to the general criteria set forth above, the proportion of the single levy on electric energy allocated to the Fondo Federal da Eletrificação represents an item of self-financing in respect of that sector, whereas the other sources constitute government contributions, since from an economic standpoint they are similar to the direct contributions made by the Treasury from general revenue, or from taxes levied on the community in general and not on electric energy users in particular, the revenue from which is destined for the expansion of electric energy;

(iv) It must be recognized that the inclusion of development bank credits under the heading of "Government contributions" is rather more questionable. Apart from the difficulty of separating such credits on the basis of the unreliable information available, when—as in the case of Brazil—the development bank is also the administrator of the electrification fund (as was the Banco Nacional do Desarrollo Económico until the establishment of Eletrobrás), there is also a sound reason for including them under "Government contributions". Save in a few special cases, development banks, which are sometimes also known as government investment banks, have not attained financial autonomy and must continue to rely largely on frequent contributions from the Treasury or Central Bank of the country concerned. When inflation reaches an annual rate of 30, 40 or 50 per cent, it is clear that a credit granted by a development bank at a yearly interest rate of 6 or 8 per cent is tantamount to a gift to the borrowing enterprise and will represent an equivalent disinvestment for the lending agency unless it receives new financial contributions from the Government;

(v) The reinvestment of profits by both public and private enterprises has been included under "self-financing". This may be open to doubt when the profits reinvested have derived from capital contributions made by the Government or development banks, in view of the fact that the Treasury contributions or development bank credits have been included under the head of "Government contributions". However, the explanation is simple and concords with the general philosophy underlying the methodology of the table in question; the main issue is the source of the funds and not the institutional procedure used for channelling them into the electric energy sector. The net or gross profits on Government capital are derived from that sector and their reinvestment is therefore a form of self-financing, while the Treasury contributions or development bank credits stem from resources outside the sector and should therefore be included in an item of a different economic nature from that of self-financing.

The table of sources of funds for financing the electric energy sector provides some useful pointers, particularly if it is compared with the forecasts made a few years ago in relation to the financial problems of the sector.[7] It had previously been estimated that self-financing would cover about 35 per cent of the sector's financial needs in the sixties. Those expectations were, however, surpassed in the first few years of the decade. This is a healthy sign and contrasts with the meagre contribution obtained under that head in the fifties. When the evolution of average rates and prices are examined later, an analysis will be made of the reasons for the financial improvement in the electric energy sector.

Contributions from international financing agencies also improved upon the targets set, thereby making it possible to cover 80 per cent of the import content of investment in the sector. Anxiety about the availability of domestic resources has thus been relieved, and there has been less need for suppliers' credit, with all its attendant drawbacks as regards both higher direct and indirect costs, and the fact that it occasionally compels the purchaser to overlook strictly economic considerations in choosing his equipment.

Additional capital contributions were confined to those made by the Government, since the private sector's contribution consisted almost exclusively of the reinvestment of profits and therefore in the present classification, comes under the head of self-financing. The total amount of new capital contributed was sufficient to cover 19 per cent of the sector's aggregate financial needs, but fell short of the target of 25 per cent specified in the above-mentioned ECLA document. Its failure to meet the target was primarily due to inflation, and to the lack of loan conditions that would be attractive to potential savers even when the national monetary unit was progressively losing its value. There is no *a priori* reason why the electric energy sector should not be able to capture a much larger share of private savings than it does at present, and thereby prevent them from being channelled into less vital sectors of the economy or from being sent abroad.

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[6] *Estudios sobre la electricidad en América Latina*, United Nations publication, Sales No.: 63.II.G.3, vol. I, p. 309.

[7] *Estudios sobre la electricidad en América Latina*, op. cit., vol. I, p. 346.

Table 120. Latin America: Average sales price of electric energy in selected countries
(*Monetary units of each country per kWh, based on 1959 purchasing power*)

Country	*Average price 1959*	*Average price 1962*	*Average price for 1962*[a] *(Dollar mills)*	
			A	*B*
Argentina	1.92	1.85	30	30
Brazil	1.70	0.89	6	8
Chile	0.025	0.027	11	35
Mexico	0.21	0.24	20	21
Venezuela	0.12	0.12	26	36

Note: The enterprises taken into account for purposes of this table are those that are the most representative as regards their share in the supply of electric energy. Such enterprises are:

Argentina: Servicios Eléctricos del Gran Buenos Aires, S.A.
Brazil: São Paulo Light—Serviços de Eletricidade, S.A.
Chile: Cía. Chilena de Electricidad Ltda.
Mexico: Cía. Mexicana de Luz y Fuerza Motriz S.A. (now called the Compañía de Luz y Fuerza del Centro, S.A.).
Venezuela: C. A. La Electricidad de Caracas.

[a] In order to work out these figures, the following exchange rates were adopted for 1962, in terms of monetary units per dollar:

	A	*B*
Argentina	116	113
Brazil	391	304
Chile	2.42	1.053
Mexico	12.50	12.5
Venezuela	4.55	3.35

Column A lists the average exchange rates on the free money market, and column B the prevailing exchange rates for foreign trade, which are those used in other chapters of the Survey.

(b) *Evolution of rates*

The increased ability of the electric power industry to finance its own expansion in recent years is one of the direct and immediate results of a more realistic rate policy than that prevailing in the fifties. The need for a reform in this field was made clear by the discussions and conclusions of the Latin American Electric Power Seminar,[8] but it must be admitted that a move had already been made in that direction, and some specific measures had been taken to rescue the electricity enterprises from the financial bottleneck in which they were caught, and which had led to a quantitative and qualitative deterioration in the service supplied.

In the four main countries with an unsatisfactory rate policy (Argentina, Brazil, Chile and Mexico), all but Brazil made substantive changes in the policy; some of those changes had already come into effect in 1959, and will be referred to more specifically when the question of State action in the electric energy field is discussed. But in some cases steps were taken, over and above the modifications made at the time, to provide a more or less automatic system of adjustment and thereby ensure that the same kind of situation would not recur and create new bottlenecks in the process of electric energy development. Consequently the stability which had been lacking in the earlier period (see table 120) was largely restored.

Table 120 shows that, except in Brazil, it was possible to maintain, and even in one case to increase, the average real price of the electric power sold. This improvement in the stability of the average price of electric power was accompanied by some rationalization of the rate structure, which in the past had included such absurd elements as prices for large-scale industrial consumers that were higher than the average price for the residential consumer, while the latter was often lower than the average price for the enterprise's total sales. All this represented an unjustifiable subsidy to the high- and medium-income groups, which consumed more than two-thirds of all residential electric power, and led to serious distortions in the use of energy resources in the countries concerned.

Table 121. Latin America: Typical bills for selected enterprises
(*In local currency at 1963 prices*)

Enterprise	*Year*	*Residential*		*Commercial*	*Industrial*
		25 kWh	*100 kWh*	*500 kWh*	*4,000 kWh–20 kW*
Compañía Chilena de Electricidad	1959	1.09	6.71	54.2	147.30
	1963	1.18	8.77	65.8	190.02
C.A. La Electricidad de Caracas	1959	6.82	24.02	124.46	584.68
	1963	6.68	23.55	...	504.00
Lima Light and Power	1959	23.55	70.04	...	...
	1963	14.30	78.80	767.40	2,000.00
Empresa Eléctrica del Ecuador-Guayaquil	1959	29.70	59.00	439.54	2,585.8
	1963	29.19	80.01	397.22	1,911.0

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[8] Held at Mexico City, D.F., August 1961. See the report of the seminar, *Estudios sobre la electricidad en América Latina*, op. cit., pp. 3–62.

Table 122. Latin America: Typical bills for selected enterprises, December, 1963
(*In local currency at 1963 prices*)

Country and enterprise	*Residential*		*Commercial*	*Industrial*
	25 kWh	*100 kWh*	*500 kWh*	*4,000 kWh–20 kW*
Brazil				
São Paulo Light S.A.	194	776	4,656	27,631
Colombia				
Empresas Municipales de Cali	3	12	65	440
Costa Rica				
Instituto Costarricense de Electricidad	3.38	13.50	67.50	440
Mexico				
Cía. Mexicana de Luz y Fuerza	12	42	253	952
Uruguay				
Usinas y Teléfonos del Estado	9.75	26	430	2,120

Calculation of a weighted average for the mean sales prices shown in column B in table 120 (the weighting coefficients being the relative contribution made by each of the five countries in generating public power for the group, which are only approximate estimates, since the average prices of the enterprises included in the table do not correspond exactly to the total average price for the country) gives a value of 20.5 mills for 1962 if Brazil is included, and 31.5 mills per kWh if it is excluded, since, as indicated before, Brazil has an exceptionally low tariff.

Table 124. Central America: Residential consumption of electric energy supplied by the public utility, 1961[a]

Country	*Average annual consumption (kWh per consumer)*	*Average earnings per kWh (Dollar cents)*	*Average annual bill (Dollars)*
Costa Rica	3,114	1.56	48.58
El Salvador	872	3.47	30.26
Guatemala	1,309	4.65	60.87
Honduras	793	9.19	72.87
Nicaragua	867	6.79	58.87
Central America	*1,572*	*3.17*	*49.83*

[a] Partly based on estimates.

Table 123. Central America: Average consumption per consumer and average earnings per kWh in the public service sector

Country	*1950*	*1959*	*1960*	*1961*	*1962*	*1963*	*Annual rate of increase (percentage) 1950–63*
Central America							
Average consumption, kWh	1,365	2,244	2,491	2,546	2,680	2,760	5.6
Dollar cents per kWh	2.74	3.09	3.08	3.12	3.07	3.04	0.8
Costa Rica							
Average consumption, kWh	2,375	3,585	3,823	3,845	3,890	3,840	3.8
Dollar cents per kWh	1.19	1.63	1.63	1.71	1.85	2.01	4.1
El Salvador							
Average consumption, kWh	1,222	2,305	2,443	2,414	2,570	2,710	6.3
Dollar cents per kWh	3.46	3.37	3.40	3.37	3.27	3.25	−0.4
Guatemala							
Average consumption, kWh	1,352	1,777	2,030	2,132	2,300	2,480	4.8
Dollar cents per kWh	3.45	3.99	3.88	3.85	3.75	3.62	0.4
Honduras							
Average consumption, kWh	682	1,094	1,842	1,843	2,050	2,210	9.5
Dollar cents per kWh	8.97	7.92	5.67	5.20	5.00	4.80	−4.7
Nicaragua							
Average consumption, kWh	586	1,434	1,599	1,641	1,835	2,125	10.4
Dollar cents per kWh	3.80	4.27	4.77	5.13	4.30	3.80	0.0

To give a better idea of the rate question, tables 121 and 122 present a list of typical bills (that is, bills based on the respective tariffs for certain typical consumers) for some of the main electric power enterprises of the region in 1963. In some cases, when information was available for 1959, it has been included, at 1963 prices, for purposes of comparison.

Tables 123 and 124 trace the evolution of some of the main financial variables in the field of electric energy in Central America. The first is particularly interesting because it shows the increase in average consumption per head and in the average return or price per kWh. During 1950–63, average consumption doubled from 1,365 to 2,760 kWh a year in Central America as a whole, and the average price also rose slightly from 2.74 to 3·04 dollar cents per kWh, while at the same time distribution became more uniform among the different countries, and the great disparities that had existed, such as that between Honduras and Costa Rica in 1950, were lessened.

(c) *State action*

A trend which had already begun to manifest itself at the end of the fifties and conduced towards more rational action by the State in its task of guiding the expansion of the electric energy sector was intensified in recent years.

As already noted in the comments on the sources of funds, the increased capacity of the electric energy sector to finance its own expansion has permitted the State to allocate some of its general revenue to other investments for which there is no alternative source of funds. This development was made possible by a more realistic attitude towards the rise in rates, since it came to be understood that they could not remain at the same level in the midst of a general inflation. The change in Government rate policy took a number of forms: in some cases legislation of a general character was enacted, while in others more flexible administrative rules were adopted in order to give the enterprises to whom a concession was granted a margin of return on the capital invested that would be significant in terms of new investment requirements.

The two most recent examples of this type of legislation are the General Act on Electricity Services in Chile (Legislative Decree No. 4 of 24 July 1959), and Act No. 15336 of 20 September 1960 in Argentina. In both cases the principle of "replacement cost" was adopted for the purpose of fixing rates, that is, operational equipment was valued at a figure representing the cost, at the time of the valuation, of replacing it by equipment of similar quality. The Chilean Act authorizes a five-yearly revaluation of fixed capital on the basis of this criterion, less deductions for depreciation, but it also provides for an annual adjustment to present value (on the basis of an internal price index) that would include new investment. Similarly, legislation in Peru (Act No. 12378 of 8 June 1955 and the corresponding Regulative Decree of 5 January 1956) provide for the revaluation and calculation of depreciation on the grounds of replacement value rather than of cost.

The rate of return and the basis on which it is calculated vary considerably in the cases mentioned. Chilean legislation establishes a return of 10 per cent on the net fixed assets of the concessionaire. Peruvian law, on the other hand, establishes a return of up to 11.5 per cent on the concessionaire's capital (the servicing of the debt is chargeable to operational costs), but this does not include uncommitted reserves based on undistributed profits, on which the return may not exceed 8.5 per cent. In the concession contract of 1 February 1962 between the Government of Argentina and the State-owned enterprise SEGBA S.A., a rate base is established, in accordance with the provisions of Act No. 15336, which embodies the principle of replacement cost. In this particular case the method adopted for the purpose was to express the accounts and the annual estimate of the capital at present value in terms of dollars. According to this agreement the rates, in addition to covering operational costs and contributions to the Depreciation and Renewal Fund, should allow for a net profit, after payment of all taxes, of 8 per cent of the value of the rate base for the year in question.

In the case of some state enterprises the modification of the tariff policy was obtained by means of a mere administrative decision and not through a general modernization of the basic legislation governing the electric power industry. Thus, for example, Decrees Nos. 11016 and 16643 of 1959 relating to the enterprise Agua y Energía Eléctrica de la República Argentina, stipulate that, in calculating the average sales price, allowance should be made for a contribution to a fund for expansion and renewal equivalent to 10 per cent a year of the replacement value of the equipment and services used for operating purposes. Article 3 of Decree No. 16643 of 1959 states that the contribution to the Renewal and Expansion Fund is to be re-estimated annually at its present value in accordance with the replacement costs established by the Secretary of State for Fuel and Power. It should be noted that this contribution is supposed to cover both amortization and the net return on capital. If an average of 3 per cent is estimated for amortization, calculated at the actual cost of replacement, 7 per cent is left for the net return, which is the same proportion as that obtained under the application of the Chilean law—10 per cent for net profits on fixed assets less 30 per cent profits tax. This rate cannot be compared with the systems adopted by SEGBA in Argentina and by the Peruvian legislation, which are based on profits accruing from share capital or capital belonging to the enterprise; the relation between the two will therefore depend in each case on the coefficient of indebtedness (the debt/assets ratio) of the concessionaire.

In Mexico the tariff system was radically changed in January 1962 when standard rules were adopted and applied to the three large state companies holding concessionary rights. The bases for the change were as follows:

(i) The rates were calculated in such a way as to make a substantial contribution to the financing of new projects and the maintenance of existing works. This contribution was calculated as being equal to a return of 5 per cent on the rate-base capital, after deduction of annual depreciation charges and provision for the normal operating and maintenance costs of the enterprises;

(ii) The standardization of rates was carried out in stages to be completed in the third quarter of 1964;

(iii) The rate schedule for the residential sector was drawn up with a view to favouring consumers in the lower-income group while substantially raising the rates for high levels of consumption, so that the price for the latter category was brought into line with the actual cost of providing the service;

(iv) The rate subsidies applicable to state enterprises were abolished.

The average level of the new rates was 30 per cent higher than in 1960, which made it possible to reduce dependence on contributions by the Federal Government and to obtain international loans on more favourable terms than during the previous period.

Another of the more substantive aspects of State action in the field of electric energy was the stimulus given to those enterprises which, although financed by public capital, operate as juridical persons according to private law, namely, corporations like ENDESA in Chile, SEGBA in Argentina, Compañía de Luz y Fuerza del Centro and Industrial Eléctrica Mexicana in Mexico, Central Elétrica de Furnas and others in Brazil, etc. As regards those state electricity enterprises that operate under the Government, this new institutional form of administering public capital has the advantage of not being governed by rules for the administration of such funds that might lead to unsuitably inflexible arrangements for the carrying out of the activities concerned.

Probably the most novel and interesting departure in this field has taken place in Brazil, where Act No. 3890–A of 25 April 1961 authorized the establishment of Eletrobrás (Centrais Elétricas Brasileiras, S.A.), a Federal Government enterprise that acts as a juridical person according to private law and was set up to channel and direct government investments in the electricity sector. Eletrobrás operates as a holding company that administers capital invested by the Government, partly through the Federal Electrification Fund, in various enterprises producing and distributing electric power, thus combining the advantages of a centralized authority and unified planning with operational decentralization as regards the construction and administration of electric power systems. In most of these subsidiary enterprises, Eletrobrás is associated with capital provided by State Governments or private concerns, or both.

Another novel aspect of Brazilian electricity legislation is the compulsory domestic loan established under Act No. 4156 of 28 November 1962 and governed by Decree No. 52888 of 20 November 1963. These provisions imposed a compulsory contribution for all electricity consumers, to be paid at the same time as the monthly electricity bills, in return for which the consumer receives bonds issued by Eletrobrás with an interest rate of 12 per cent and redeemable in ten years. This is a very important departure, since it establishes a means of imposing forced savings that can result in an effective channelling of the resources of the private sector. It is, of course, necessary to ensure that an instrument of this kind does not lose its value through inflation, since a high annual rate of increase in the general price level might transform it in practice into a tax on the sale of electricity, or a pure and simple increase in the rates.

The turn taken by the State's activities in the field of tariff policy and promotion of electric energy development is probably related to the experience acquired by it in recent years as an entrepreneur in the same sector. The trend already noted in the documents presented at the Mexico Seminar in 1961 towards increasing participation by the State in electric power production and distribution continued unchanged during the period under review. It may be estimated that, on 31 December 1963, state or provincial Governments controlled 70 per cent of Latin America's total installed capacity in public utilities as compared with only 46 per cent at the end of 1959.[9]

The increase in state control during this period consisted mainly in the following transfers:

(i) The purchase by the Mexican Government of the private companies (Mex-Light and Foreign Power groups);

(ii) The bulk purchase by the Argentine Government of SEGBA shares (see "Convenio entre el Banco Industrial de la República Argentina y la Société d'Electricité (SODEC) de Luxembourg para la venta a dicho Banco, en cumplimiento de lo dispuesto por el Decreto No. 8140/61, de las acciones 'B' de SEGBA, de propiedad de SODEC");

(iii) The confiscation by the Cuban Government of the assets of the Compañía Cubana de Electricidad on 7 August 1960;

(iv) The purchase by the Colombian Government of the property of the Compañía Colombiana de Electricidad, whose functions were taken over by the State on 31 July 1962.

The foregoing estimate includes under privately owned installed capacity the Brazilian branches of American & Foreign Power, since the purchase agreement signed in Washington on 22 April 1963 between that enterprise and the Brazilian Government has not yet been put into effect and the property in question is still under the control of American & Foreign Power. Once the transfer has taken place, the proportion of installed capacity owned by the State in Latin America's public utilities will rise to 73 per cent.

3. FUTURE PROSPECTS AND PROBLEMS

(a) *Electricity works under construction or projected at the end of 1963*

Table 125 shows the public utility capacity in process of construction or installation at the end of December 1963. According to the information available, it amounted to 8.7 million kW, of which 7.0 million represent hydro power and 1.7 million thermal power of the conventional type. Capacity already installed and in operation in the public service was approximately 16.9 million kW on that date, which makes the proportion in process of construction or installation about 52 per cent of capacity in use (see maps I and II, which show the principal plants established, under construction or projected in each country). As even the projects that take a long time to complete will be in operation by the end of 1967, it is apparent that, at the present pace of construction, installed capacity will increase during the four-year period 1963–67 at a rate of over 12 per cent annually. This would be satisfactory even if accompanied by an increase in economic growth rates, and consequently in electric power demand. However, it should not be forgotten that the figures and proportions given relate to the region as a whole, and that as the regional averages are strongly affected by the figures for countries like Brazil, they are consequently far from giving an accurate picture of the situation in the other countries, especially those with the weakest economies. These differences will be made clearer by reference to table 126, which compares (for those countries on which adequate data are available) installed capacity in process of construction and capacity in operation at the end of 1963. This table shows that the coefficient in question ranges from

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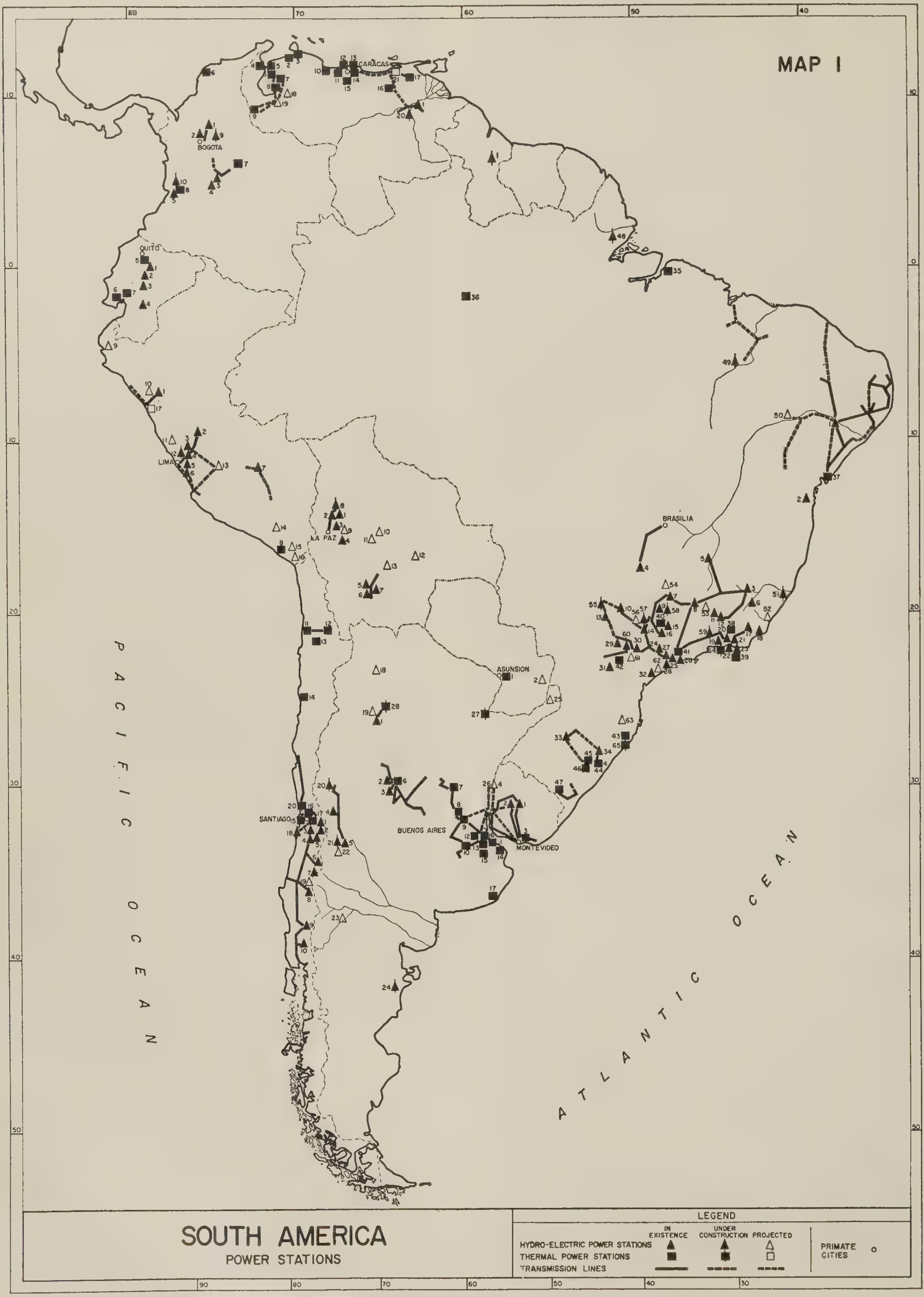
[9] Of 23.1 million kW of installed capacity on 31 December 1963, 16.9 million, or 73 per cent, represented public utility capacity and the remainder self-supply. The capacity of privately owned public service enterprises was estimated to be 4.7 million kW at year end. Their share of power sold is higher, since a number of them also distribute power that is generated by publicly owned enterprises.


MAP 1
CARACAS
BOGOTA
QUITO
LIMA
LA PAZ
BRASILIA
ASUNSION
SANTIAGO
BUENOS AIRES
MONTEVIDEO
PACIFIC OCEAN
ATLANTIC OCEAN
SOUTH AMERICA
POWER STATIONS
LEGEND
IN EXISTENCE
UNDER CONSTRUCTION
PROJECTED
HYDRO-ELECTRIC POWER STATIONS
THERMAL POWER STATIONS
TRANSMISSION LINES
PRIMATE CITIES
80
70
60
50
40
30
90
10
0
20

a minimum of 0 for Uruguay to such high levels as 81.5 per cent for Brazil, and over 100 per cent for Honduras and Nicaragua.

Given the average cost of the electric power programmes in question (including the corresponding transmission lines and amplification of the distribution systems), the expansion of installed capacity involved in the projects under construction at the end of 1963 would represent an investment of about 3,500 million dollars over the next four years. This seems a reasonable target in the light of the figures recorded in recent years for such variables as the self-financing of the electric energy sector and the contributions of international financial institutions. However, it may be relevant to touch on two points already mentioned in earlier secretariat documents and fully debated at the Mexico Seminar. The first is the importance of a correct allocation of investment resources in which due regard is paid to the improvement and expansion of distribution networks. From the scanty information available on this aspect for the last few years, it may be taken that transmission and distribution losses, and losses through unregistered consumption, represent a regional average of 18 per cent of the net power generated, which seems to indicate a lack of proper concern. The second point is the need to establish or expand financial machinery for the purchase of capital goods of domestic origin for electric power investment. This is becoming an increasingly serious problem as the rate of import substitution rises for this type of production. In Brazil, where the fact that the electric power industry is relatively more developed aggravates the problem, the latest medium-size hydroelectric plants (such as Boa Esperança and Cachoeira-Capitari) provide for as much as 82 per cent of the total cost of the project to be paid in local currency.

Table 125. Latin America: Installed capacity in the public electricity service in course of construction or installation on 31 December 1963

Country	*Hydro*	*Thermal*	*Total*
Argentina	210	835	1,045
Bolivia	14	—	14
Brazil	3,738	254	3,992
Chile	360	131	491
Colombia[a]	320	...	320
Ecuador	48	—	48
Paraguay	—	—	—
Peru	312	22	334
Uruguay	—	—	—
Venezuela	350	—	350
Costa Rica	56	—	56
Cuba[b]	...	300	300
Dominican Republic	17	27	44
El Salvador	18	—	18
Guatemala	13	—	13
Haiti	...	...	...
Honduras	30	—	30
Mexico	1,320	99	1,419
Nicaragua	50	—	50
Panama	4	—	4
Surinam	150	—	150
TOTAL	7,010	1,668	8,678

[a] Incomplete data, covering Calima only, which at the first stage will have 120 MW.

[b] Incomplete data, covering Rente and Mariel only.

It is only fair to recognize that some progress has been made in solving this problem, although not enough. For example, the World Bank loan to SEGBA S.A. to enable it to complete the construction of the Costanera plant (600 MW) includes the payment of some local costs. And more recently a loan of 63 million dollars made by an Italian consortium to the Brazilian enterprise CELUSA (Centráis Elétricas de Urubupungá S.A.,) which is undertaking the construction of the Jupiá and Ilha Solteira projects with a total installed capacity of about 4.5 million kW, earmarks 30 per cent for purchases from local industry, including the financing of raw materials imported by the industry for manufacturing gates and other items of basic equipment.

Table 126. Latin America: Ratio of installed capacity in course of construction or installation to existing installed capacity on 31 December 1963

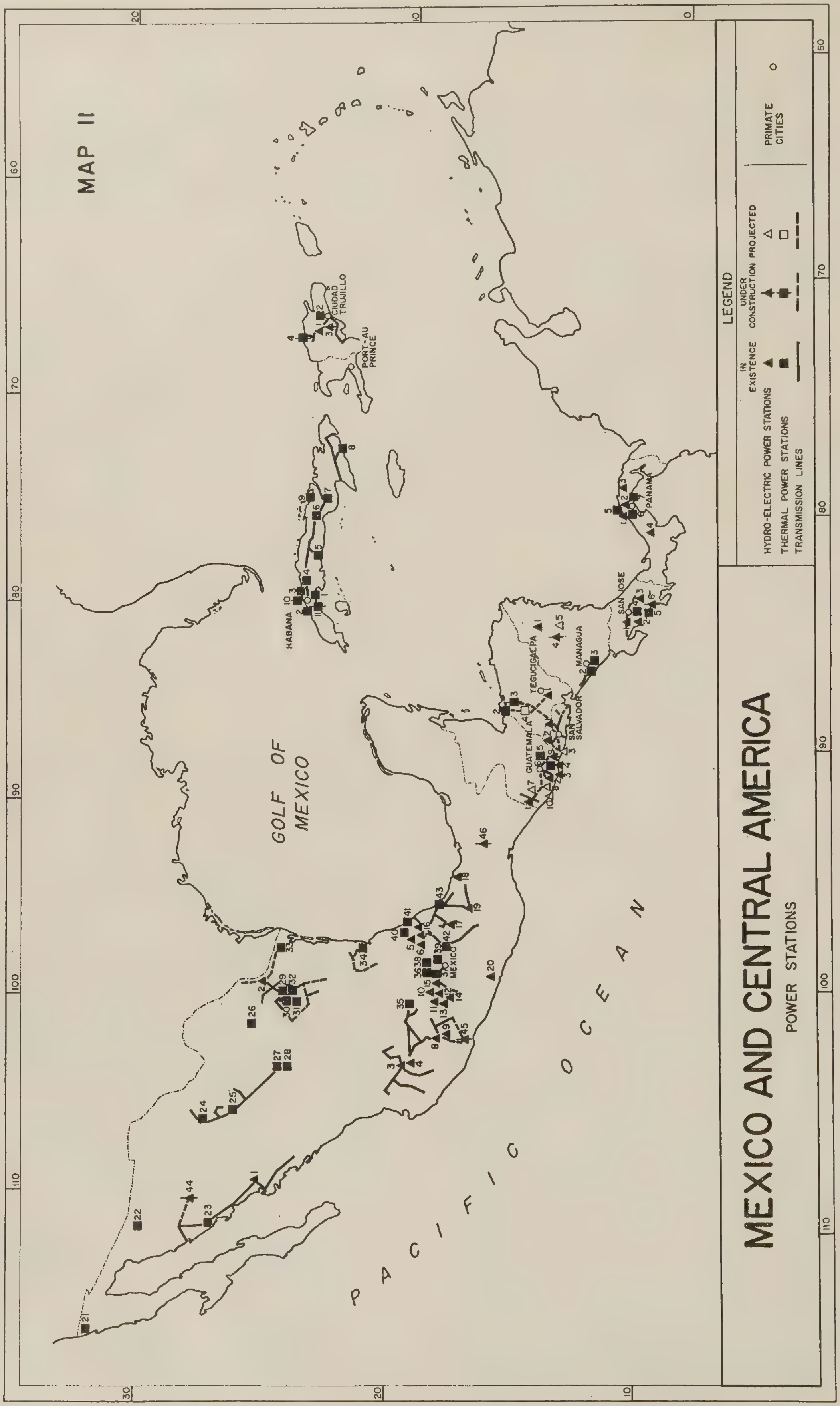
(*Public service sector only, in MW*)

Country	*Capacity in course of construction or installation* (P_c)	*Existing installed capacity* (P_i)	$\phi = P_c/P_i$ *(percentage)*
Argentina	1,045	3,000	34.8
Bolivia	14	84	16.7
Brazil	3,992	4,900	81.5
Chile	491	820	60.0
Colombia[a]	320	880	36.4
Ecuador	48	128	37.5
Paraguay	—	29	0.0
Peru	334	420	79.5
Uruguay	—	435	0.0
Venezuela[a]	350	1,520	23.1
Costa Rica	56	136	41.1
Cuba[a]	300	...	
Dominican Republic	44	80	55.0
El Salvador	18	96	18.7
Guatemala	13	73	17.8
Haiti	...	...	
Honduras	30	28	107.0
Mexico	1,419	3,369	42.2
Nicaragua	50	46	109.0
Panama	4	68	5.9
TOTAL	8,528	16,112	50.5

[a] The data on capacity under construction are incomplete.

One question that deserves attention is the distribution of projects under construction or installation by size. Of the 8.7 million kW under construction the following percentages represent the scale of the different plant sizes:

Scale of installed capacity (MW)	*Percentage of total projects under construction*
0–50	7
50–100	12
100–250	20
250–500	32
500–1,000	14
Over 1,000	15



MAP II

MEXICO AND CENTRAL AMERICA

POWER STATIONS

Of the group of projects already completed or at an advanced stage that together account for an installed capacity of 13.4 million kW, 11.6 million kW represent hydroelectric power and only 1.8 million kW thermal power.

One of the reasons for this imbalance is that there are many more hydro than thermal projects (apart from the fact that hydro projects need more time to complete because of the complicated and heavy work involved), and another that it is easier to obtain data about hydro plants because they are more striking projects and generally tend to be given greater publicity. Nevertheless, the imbalance raises serious doubts as to whether the present programme of electric energy expansion is being undertaken on a rational basis, and how far hydro power is being given proper thermal support to ensure the optimal use of the region's energy resources. Consequently, although it is important to recognize the danger (which has recently become very evident in certain countries) that an over-abundance of studies and discussions may be an obstacle to constructive action, it would seem advisable for some programmes to be reviewed in the light of more precise criteria as regards priorities and the allocation of scarce resources.

One of the purposes of such a review should be to improve co-ordination between programmes for electric energy and for the production and use of petroleum and natural gas. In certain circumstances an electricity programme based mainly on hydro power, in conjunction with a petroleum programme aimed at self-sufficiency as regards petroleum refining and the supply of liquid fuels, might well lead to the production of considerable surpluses of heavy petroleum products that could only be sold abroad at a loss. For the same reason the greatest care should be observed in selecting the values of the two basic parameters used—the price of fuel and the rate of interest—in studying alternative forms of electricity production, in order to ensure that no decisions are taken that would conflict with the general interests of the community.

(b) *Regional integration of electric energy and international utilization*

One of the signs that the institutional structure of the electric power industry in Latin America has attained a certain maturity is the trend towards greater regional integration, both at the national level and in the form of international interconnexions.

There are numerous examples of this trend, including the co-ordination between the Mexican State enterprises; the establishment of a tripartite committee in Venezuela, consisting of La Electricidad de Caracas, CADAFE and the Corporación Venezolana de la Guayana, to discuss problems arising from the future Caracas-Caroní interconnexion and the present lack of standardization in frequencies; to comprehensive study of energy problems in the Centro-Sul region of Brazil; and the increased co-ordination between the expansion and operational programmes of the main enterprises in Argentina and Chile.

A number of measures have been taken with a view to international connexions and the combined development of electric power systems. Among those that appear to be the most feasible and significant for the immediate future are the projects for El Salvador and Honduras, Venezuela and Colombia, and Uruguay and Argentina. In the first case the Comisión Ejecutiva del Río Lempa and the Empresa Nacional de Energía Eléctrica de Honduras have approved in principle an interconnexion project involving the construction of works on Lake Yojoa and the River Lindo within shorter periods than were envisaged when the two schemes were planned separately. The Venezuela–Colombia project will try to interconnect two small local systems near the two countries' common frontier: the Norte de Santander system in Colombia and the Táchira system in Venezuela, which now have a capacity of 17 and 29 MW respectively. The interconnexion will be made by means of a high tension line of 110 kV and an initial capacity of 25 MW, which will link up the Venezuelan plant of La Fría with a Colombian line of 110 kV that connects the Tibú plant with Cúcuta. The interconnexion between Uruguay and Argentina will join the Montevideo–Río Negro system in Uruguay to the Gran Buenos Aires and Litoral system in Argentina. This is undoubtedly the most important of all these projects, since it will link up two systems whose respective capacities at the end of 1964 will amount to 435 and 2,713 MW respectively (55 per cent of the first system being based on hydro power dependent on a single rainfall régime, while the second system is 100 per cent thermal). The interconnexion could be made either across the River Uruguay and the Province of Entre Ríos at Fray Bentos (Uruguay), or through the River Plate by means of an underwater cable between Colonia and Buenos Aires.

As regards international utilization, it is again the River Plate countries that seem to have the best immediate chance of carrying out a project of that kind, since the completion of the studies and construction plans for the Salto Grande hydroelectric plant and the prevailing desire to interconnect the two systems as soon as possible, even before the new project is begun, paves the way for the opening of financial negotiations which, if successful, will enable the project to be implemented as soon as the Governments have taken a final decision on the matter.

Mention should also be made of a very significant recent development, namely, the contact established between the Government of Paraguay and the Eletrobrás working group (Brazil) to study ways and means of harnessing the hydroelectric potential of the Sete Quedas Falls on the River Paraná.

However, these promising indications should not lead to an underestimation of the difficulties to be overcome before the proposed measures can be put into effect, let alone of the political and social problems that are likely to arise as a result of traditional attitudes encouraging isolationism and local disputes. Three specific problems hampering some of the projects for regional integration and international exploitation are the lack of capital, the imbalance in economic capacity, and the absence of institutional co-ordination in the electric energy sector. The fact that nearly all the Latin American countries suffer from a serious shortage of capital leads to the conclusion that, to be more economic, interconnexions should be designed so as to ensure that after a reasonable lapse of time a similar volume of power could be transferred both ways. If that proved to be impossible, it might be arranged for the cost of the works carried out not to be wholly defrayed by the country in which they were located, but to be shared by the interconnected country to an extent commensurate with the volume of power that it hoped to receive thereby during a given period of time. Its contribution could subsequently be returned by the country in which the plant was situated within a certain number of years, in either money or power. A similar and possibly simpler scheme might be adopted for financing international hydroelectric projects between countries with widely differing economic capacities. Under this scheme, debt servicing during the first stage of the project's useful life would be proportional to the amount of power withdrawn by each of the two countries from the system, and an adjustment would be made in the more distant future to ensure that each country would eventually pay for and own half the plant. Adequate international financing could solve many of the problems that would arise in the interim.

The institutional problems that crop up when international projects are being executed derive from the fact that the studies and plans concerned are usually prepared by joint governmental committees acting independently of the public utility concessionaires in the large consumer areas in the vicinity of the project. But, when the time comes to begin construction, the public utility enterprises have to participate, because it is they who build up and control the energy market for the project and are the only bodies that can supply the assets and other financial guarantees needed to obtain domestic and foreign credits for the execution of the project. The time would therefore seem to be ripe for a study of the legal and institutional forms that (within the political context of each case and in the light of the situations created by past developments) would impart the greatest flexibility to machinery for the promotion and execution of such projects.

C. PETROLEUM

1. PETROLEUM PRODUCTION IN 1958–63

(a) *World production*

The increase in energy consumption throughout the world has, at the same time, stimulated the petroleum industry. World output expanded by 42.5 per cent in 1958–63, or 32.5 per cent per head, which represents an annual growth rate of 7.3 per cent. In absolute terms, average production went up from nearly 2.9 million m^3/day in 1958 to over 4.1 million in 1963. The average figures include such notable increments as that of nearly 1,300 per cent in North Africa, 80 per cent in the Soviet Union and 60 per cent in the Middle East. Western Europe achieved a 50-per-cent increase, while that of Latin America was barely 30 per cent, i.e., less than the world average. Table 127 gives a more detailed picture of the increases in production of crude in the various countries and geographical regions.

Since 1961 the Soviet Union has taken Venezuela's place as the second most important world producer. The United States continues to head the list, with almost 30 per cent of the world total in 1963, while the Soviet Union accounted for 17 per cent and Venezuela for 13 per cent. Latin America, as a region, is gradually losing ground. From over 18 per cent in 1958 its share shrank to 17 per cent in 1963, whereas the Arab countries' share rose from 23 to 26 per cent during the same period.

To judge from the rising trend of world petroleum consumption, production must also continue to increase in the next few years, even if the centre of activity shifts to the Middle East and North Africa.

(b) *Production in Latin America*

In previous studies ECLA has pointed out that petroleum and natural gas are Latin America's main sources of energy, although the volume of supplies varies from one country to another.

In 1958–63 Latin America's total production rose by 30 per cent, from 194.32 million m^3 in 1958 to 252.82 million m^3 in 1963 (see table 128). If Venezuela is excluded the increment was 50 per cent. The most notable headway was made by Argentina, which almost trebled its output, from 5.668 million m^3 in 1958 to 15.204 million m^3 in 1963.

During the same period, Venezuela, Latin America's foremost petroleum producer and the third largest in the world, raised its output from 151.16 million m^3 to 188.482 million m^3, which is equal to an increment of 25 per cent. In addition, Mexico registered an increase of 25 per cent (from 16 million m^3 to 20.003 million m^3). Colombia's output, despite a decline in 1960–62, went up by 30 per cent, i.e., from 7.457 million m^3 in 1958 to 9.691 million m^3 in 1963. Chile and Brazil continued to develop their few active reservoirs on an intensive scale and obtained increases of 130 and 80 per cent respectively. Peru maintained the same production level, while those of Bolivia and Ecuador fell by 20 per cent.

The increase in Argentina was due mainly to the intensive drilling and extraction programme carried out under contracts signed with a number of private enterprises after 1958. Those contracts were cancelled in November 1963, although the enterprises concerned continue in operation and Yacimientos Petrolíferos Fiscales has expressed its intention of maintaining the levels reached.

Colombia's production decreased in 1960–62 because of a drop in the output of its principal oilfields. However, it is hoped that the discovery of the Río Zulia oilfield combined with a higher level of output at the Provincia and Payoa fields will send up production in the next few years. The yield from these new oilfields has been taken into account in the estimate for 1963.

The increase in Latin America's aggregate production and utilization of natural gas was substantial and outstripped that of crude petroleum. With Venezuela excluded, the increment becomes much greater, amounting to about 100 per cent (see table 129).

The most notable development during the period 1958–63 took place in Argentina, where production of natural gas increased fourfold, followed by Chile, whose output trebled. This was a natural development since production of gas usually keeps pace with that of crude, and this expanded considerably in both countries.

Consumption of natural gas also increased in Latin America in 1958–63. Argentina, Brazil, Chile, Colombia, Mexico and Venezuela produced enough for their own needs, but Argentina and Brazil imported a small amount of liquefied petroleum gas from Chile.

Table 127. World output of crude petroleum
(*Thousands of m³/day*)[a]

	1958	*1962*	*1963*	*Percentage variation 1958–63*
Principal countries				
United States	1,066.4	1,166.4	1,198.4	12.4
Soviet Union	401.4	634.7	715.5	78.2
Venezuela	413.9	508.8	516.1	24.7
Kuwait	224.0	295.7	306.9	37.0
Saudi Arabia	161.4	242.1	257.3	59.4
Iran	130.6	206.7	233.7	78.9
Iraq	115.6	159.8	178.0	54.0
Canada	72.1	106.2	114.0	58.1
Indonesia	51.7	72.8	71.9	39.1
Algeria	1.5	68.4	79.8	522.0
Mexico	41.0	48.5	50.9	24.1
Argentina	16.3	42.4	41.6	155.2
Neutral Zone	13.1	37.8	48.6	271.0
Qatar	25.8	29.9	30.7	19.0
Libya	—	29.3	74.7	—
Colombia	20.5	22.6	26.5	29.3
Trinidad and Tobago	16.3	21.1	21.3	30.7
Federal Republic of Germany	13.7	20.8	22.6	65.0
Others	88.4	125.6	140.1	58.5
WORLD TOTAL	2,897.2	3,839.6	4,128.6	42.5
Principal regions				
North America[b]	1,138.5	1,272.6	1,312.4	15.3
Latin America	529.9	675.7	688.5	29.9
TOTAL, WESTERN HEMISPHERE	1,668.4	1,948.4	2,000.9	19.9
Western Europe	37.7	52.3	55.6	47.5
Middle East	678.3	985.9	1,072.9	58.2
Africa	13.7	126.2	189.8	1,285.4
Asia and the Pacific	74.3	92.1	93.9	26.4
Soviet Union and Eastern Europe	401.4	634.7	715.5	78.2
TOTAL, EASTERN HEMISPHERE	1,205.4	1,891.2	2,127.7	76.5

SOURCE: *Oil and Gas Journal* (several issues).

[a] 1 m³ = 6.29 barrels.

[b] Except Mexico, which is included in Latin America.

Mexico pipes natural gas to the United States and, in its turn, imports it in small quantities to supply areas that are not connected with its distribution system, particularly in north-west Mexico. For geographical reasons, Chile's production is used almost entirely in the vicinity of the reservoirs, but plans are well advanced to transport methane by sea for consumption in the north.

The high proportion of gas reinjected in Chile can be ascribed to the rapid growth of petroleum production and to the great distance between the reservoirs and the consumer centres.

In contrast to Chile, which consumes almost all the gas it produces, about half the output in Venezuela is wasted. The main use made of natural gas in Venezuela is for injection into reservoirs to keep up their pressure and thereby increase the recovery of hydrocarbons. Venezuela does not have a good distribution network for supplying its populated areas with natural gas at present, and the Venezuelan Petroleum Corporation has only recently begun to plan the distribution of natural gas to the inhabitants of the principal towns, beginning with Caracas. The gas will be fed through 1,600 kilometres of pipeline at the rate of 175 million m³ a year. It is expected that when these projects have been put into effect a larger proportion of natural gas will be consumed by households. As regards more use of gas for reinjection purposes, several companies operating in the field have projects in hand for the construction and enlargement of compressor plants for gas reinjection, and the Ministry of Mines and Hydrocarbons is also taking steps to see that gas wastage in the field is reduced.

Natural gas injection into producing reservoirs in Venezuela increased by 75 per cent between 1958 and 1963, and it is hoped that this trend will persist for the next few years. The proportion of gas wasted, i.e., burned in the atmosphere, diminished by 13 per cent during the period under review, despite an increment of 11.8 per cent in production.

Domestic consumption rose by 43 per cent in 1958–63, owing to more extensive use of natural gas by the petroleum industry itself and for urban and industrial purposes. In the industrial sector the upward trend was mainly attributable to the substitution of natural gas for other traditional fuels, particularly fuel oil, although another influential factor, which also helped to raise urban consumption of natural gas, was the expansion of the distribution network.

As regards the gas burned in the atmosphere, the loss of energy represented by the wastage of 16,885 million m³ of natural gas is estimated to have been 14.5 million tons of petroleum equivalent in 1962.[10] This is more than Europe's total estimated production for 1965.

Mention should also be made of the Venezuelan Petroleum Corporation's programmes for making more use of natural gas, although the quantities involved represent barely 1 per cent of the country total.

In Argentina the wastage of gas is on much the same scale as in Venezuela, in spite of the improvements observed after 1960–61 as a result of the new gasline from the north. The situation is expected to be more favourable once the second pipeline from the south has been completed.

As regards consumption in Argentina, there was an increase of 332 per cent in deliveries to Gas del Estado, an enterprise which distributes gas for industrial and household consumption. Similarly, the natural gas reinjected into reservoirs went up by 150 per cent. Yet the quantity of gas lost in the atmosphere in 1962 was 2,979 million m^3, which represents an increment of 246 per cent over the 1958 level. While it is true that the sudden increase in the production of natural gas may have prevented the preparation or completion of distribution systems for this source of energy—however satisfactory the works hitherto constructed for the purpose—it is equally true that the 41 per cent wasted in Argentina is still a very high proportion. In 1962, the amount wasted represented 2.5 million tons of petroleum equivalent, or 17 per cent of the country's commercial fuel consumption in that year.

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[10] In 1958–62, Venezuela lost 82,029 million m³ of natural gas, in other words, 70.5 million tons of petroleum equivalent or approximately 68 per cent of the total volume of commercial energy consumed by Latin America in 1963.

Table 128.—Latin America: Crude petroleum production

(*Thousands of* m^3)

Country	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*
Argentina	5,668	7,087	10,178	13,431	15,613	15,204
Bolivia	546	504	568	475	464	511[a]
Brazil	3,008	3,757	4,708	5,534	5,310	5,339
Chile	885	1,022	1,150	1,473	1,858	2,099
Colombia	7,457	8,516	8,867	8,467	8,254	9,691[a]
Cuba	54	31	26	21	21	12[a]
Ecuador	489	439	438	465	409	384
Mexico	16,000	16,814	17,293	18,572	19,326	20,003
Peru	3,114	2,868	3,014	3,083	3,101	3,325[a]
Venezuela	151,160	160,803	165,613	169,442	185,684	188,482
Trinidad and Tobago	5,939	6,506	6,716	7,276	7,718	7,770[a]
TOTAL	194,320	208,347	218,571	226,239	247.758	252,820
TOTAL, excluding Venezuela	42,840	47,544	52,958	56,797	62,074	64,338

SOURCE: ECLA, on the basis of official statistics. Cuba: *Petróleo y otros datos estadísticos;* Ministry of Mines and Hydrocarbons, Venezuela, 1963.

[a] Estimate.

Table 129. Latin America: Natural gas production

(*Millions of m^3*)

Country	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*[a]
Argentina	1,655	2,153	3,550	4,909	6,173	6,300
Brazil	300	427	535	527	511	526
Chile	1,336	1,815	2,194	2,549	3,560	5,155
Colombia	2,320	2,371	2,338	2,231	2,219	2,380
Mexico[b]	7,438	9,312	9,665	10,210	10,516	11,371
Venezuela	33,517	31,835	31,561	33,125	36,301	37,465
TOTAL	*46,566*	*47,913*	*49,843*	*53,551*	*59,280*	*63,197*
TOTAL, excluding Venezuela	13,049	16,078	18,282	20,426	22,979	25,732

SOURCE: ECLA, on the basis of official statistics.

[a] Estimates, except for Chile, Mexico and Venezuela.

[b] The figures apply to utilization instead of production, because the statistics do not include data on the reinjection and wastage of gas.

In Mexico, the progress made by natural gas production was moderate, whereas consumption expanded rather more rapidly, mainly owing to the construction of gaslines to consumer centres. Thus consumption in Mexico City increased tenfold between 1958 and 1963 (from 800,000 to 8 million m^3). It is planned to provide other urban centres with adequate networks for the piping and distribution of natural gas, and thereby reduce imports of liquefied petroleum gas.

Table 130 summarizes petroleum activities in Latin America in 1962.

2. PETROLEUM REFINING

The stage of producing crude petroleum is closely linked with that of refining, whether for the home market or for export. Moreover, the world-wide tendency for refineries to be located in the consumer centres themselves, even if the markets are not always large enough to justify it, is manifesting itself more clearly in Latin America as well. It is the outcome of the wish to economize on foreign exchange through the replacement of imports of some refined products by crude.

Accordingly, Latin America's refining capacity increased by nearly 30 per cent between 1959 and 1963. The increment was only 7 per cent in Venezuela and the

Table 130. Latin America: Petroleum activities, 1962

Country	Crude petroleum production			Crude petroleum refining			Consumption of petroleum fuels			Crude petroleum reservoirs			Geophysical activities			Exploratory wells completed			Total number of wells drilled		
	Position	Thousands of m³	Percentage of total	Position	Thousands of m³	Percentage of total	Position	Thousands of tons of petroleum equivalent	Percentage of total	Position	Millions of m³	Percentage of total	Position	Crew/months	Percentage of total	Position	Number	Percentage of total	Position	Number	Percentage of total
Venezuela	1	185,684	75	1	59,507	41	4	10,830	16	1	2,671.6	71	9	3	0.3	3	79	17	3	536	16
Mexico	2	19,326	8	2	18,802	13	1	17,560	26	2	390.3	10	2	250	24	2	106	23	2	639	19
Argentina	3	15,613	6	4	16,748	12	2	14,679	22	3	262.3	7	1	411	39	1	130	28	1	1,286	38
Colombia	4	8,254	3	6	4,372	3	5	3,353	5	4	159.0	4	5	77	7	6	20	4	8	94	3
Trinidad and Tobago	5	7,718	3	3	17,391	12		...		6	67.6	2	8	5	0.5	—	...	—	4	280	8
Brazil	6	5,310	2	5	16,518	11	3	13,654	20	5	112.9	3	3	191	18	4	70	15	5	177	5
Peru	7	3,101	1	8	2,862	2	6	2,728	4	7	47.7	1	7	20	2	5	25	5	6	143	4
Chile	8	1,858	0.7	9	2,481	2	7	2,518	4	8	23.8	0.6	4	81	8	7	19	4	7	111	3
Bolivia	9	464	0.2	12	425	0.3	10	276	0.4	8	23.8	0.6	6	24	2	8	13	3	9	48	1
Ecuador	10	409	0.2	11	625	0.4	9	635	1	9	3.2	0.1	—	0		—	0	—	10	22	0.6
Cuba	11	21	0	7	3,498	2	—	...	—	10	0.3	—	—	0		—	0	—	11	20	0.6
Uruguay	12	0		10	1,716	1	8	1,570	2	—	0	—	—	0		—	0	—	—	—	
TOTAL		247,758			144,945			67,803			3,762.5			1,062			462			3,356	

SOURCE: ECLA, on the basis of official statistics.

Netherlands Antilles, but if these are excluded it was 55 per cent for the rest of Latin America.

The Central American countries, which have always imported refined products, are now doing so on a much smaller scale thanks to the construction of several refineries there. Panama, where a refinery with a capacity of 8,750 m³/day has been built, can supply all the derivatives it needs, while Guatemala has also established a refinery with a daily capacity of 600 m³ and plans to build another capable of producing 1,430 m³/day. In El Salvador a refinery with a daily capacity of 2,200 m³ has been installed; Jamaica has built one with a capacity of 4,200 m³/day and Nicaragua has another with a capacity of 890 m³/day. In Cuba, where the refineries are now State-owned and operate on crude from the Soviet Union instead of from Venezuela as in the past, the construction of a refinery with a capacity of 6,360 m³/day has been announced. Costa Rica and the Dominican Republic are planning their first refineries.

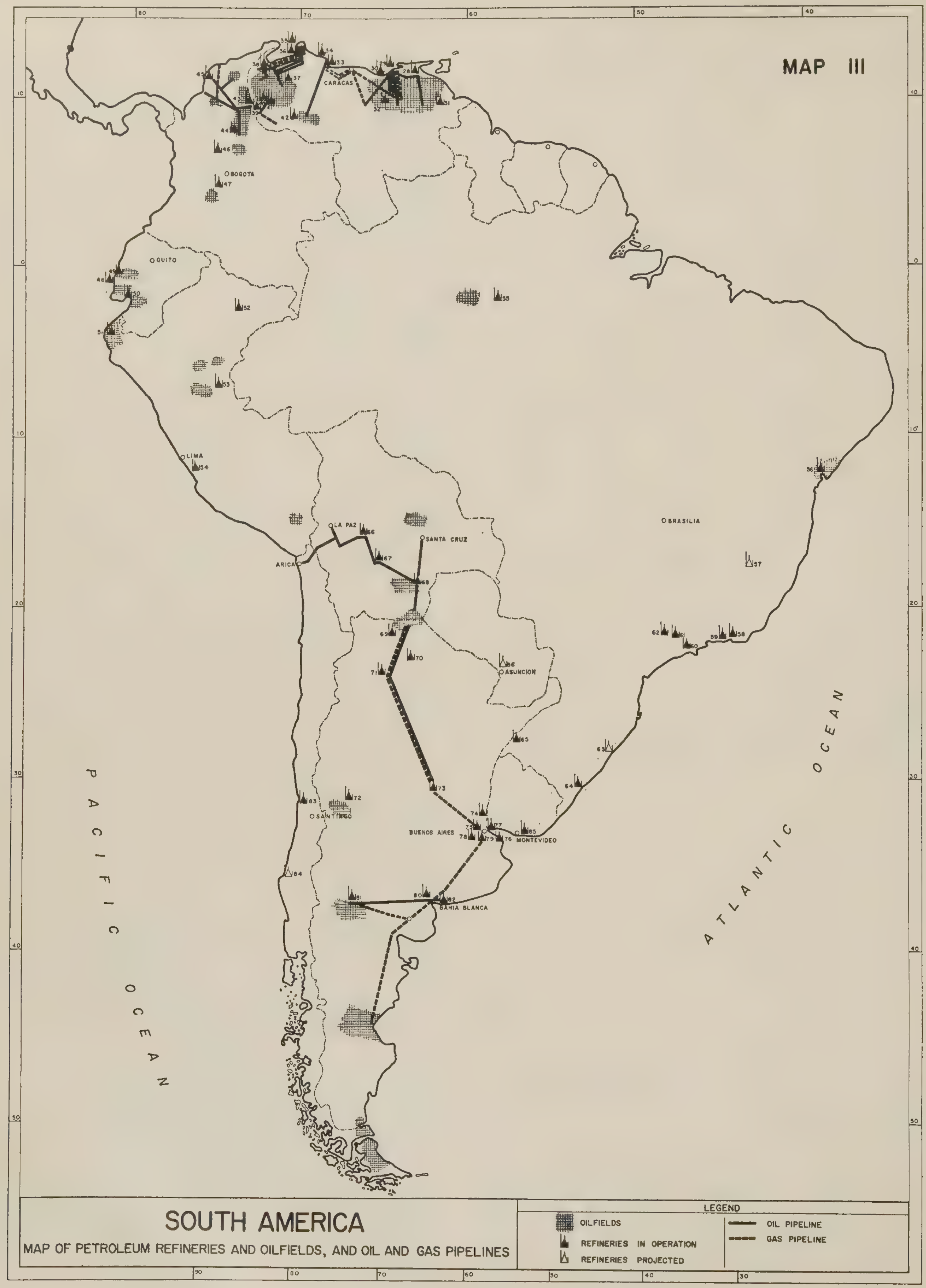
Venezuela, which is a net exporter, responded to the increase in external demand for petroleum products, and, to a lesser extent, in domestic consumption, by increasing its refining capacity from 150,320 m³/day in 1959 to 170,200 m³/day in 1963, i.e., 13 per cent over the whole period. This led to the stabilization of refining capacity in Aruba and Curaçao, which have traditionally used Venezuelan crude, although Trinidad, which also draws from the same source, has added to its capacity.

Far more noteworthy is the expansion in other Latin American countries that are trying to become self-sufficient in both crude and derivatives. Argentina, for instance, enlarged its capacity from 37,900 m³/day in 1959 to 59,255 m³/day in 1963, which means an increment of 56 per cent. But refining capacity did not increase as much as production, because Argentina has always had a certain amount of capacity available for refining imported crude.

Brazil, for its part, increased its refining capacity by 91.2 per cent during the quinquennium 1959–63. The statistics show a capacity of 24,850 m³/day in 1959 and of 47,520 m³/day in 1963. Most of the increment was due to the construction of the first phase of the Duque de Caxias refinery, which is capable of producing 14,300 m³/day.

Table 131 shows the increase in Latin America's refining capacity, and in the number of refineries. New refineries are to be found everywhere in Central America and the West Indies, and, although of limited capacity, bear out the tendency of the Latin American countries to do their own refining for the home market instead of importing derivatives (see maps III and IV).

The substantial expansion of the Latin American refineries should be regarded from two points of view: first, in relation to world trends and secondly, to production characteristics. Given the projects under way, the pace of growth in the last few years has been much slower in Latin America than in other regions. A recent projection up to 1966 indicates that Latin America's share of the 20-per-cent increment foreseen for the under-developed countries and for Western Europe will be only a tenth (2 per cent), although its actual refining capacity is 25 per cent of the total for the countries in question.



SOUTH AMERICA

MAP OF PETROLEUM REFINERIES AND OILFIELDS, AND OIL AND GAS PIPELINES

Then, too, neither the existing nor the projected refineries provide for extensive use of the more advanced methods of refining. They tend to rely on the cracking process in preference to hydrogenation and reforming, which are used in other areas and, above all, Western Europe, and which are more suitable for obtaining light fuels of higher quality and intermediate products for the petrochemical industry. However, a few countries, such as Argentina, Brazil and Mexico, have already made satisfactory progress in this respect, and Venezuela is expanding its important petrochemical industry on the basis of refinery products.

Petroleum refineries lend themselves particularly to economies of scale, which make for a considerable reduction in the unit costs of operation as the size of the refinery increases. It has been suggested that the minimum capacity for an efficient refinery is 7,000 m³/day. Of those recently constructed or at the planning stage in Central America, the Panama refinery is the only one to meet this condition, and it is primarily designed for supplying ships with bunker oil. The production of a refinery of less than minimum size is more costly, and would have to be protected through the maintenance of the present tariff level, although this would make it difficult to obtain cheap energy for industry and rule out the advantages of the economies of scale that would result from the common market.

Table 131. Latin America: Refinery capacity[a] and volume of crude petroleum refined

Country	1959		1961		1963		Percentage variation 1959–63	
	Capacity (m^3/day)	Volume refined (thousands of m^3)	Capacity (m^3/day)	Volume refined (thousands of m^3)	Capacity (m^3/day)	Volume refined[b] (thousands of m^3)	Capacity	Volume refined
South America								
Argentina	37,903	12,651	39,510	14,645	59,255	17,778	56.3	40.5
Bolivia	1,940	351	1,780	357	1,830	439	−5.7	25.1
Brazil	24,850	8,645	47,505	12,717	47,520	17,200	91.2	98.9
Chile	3,815	1,404	6,995	1,944	7,570	2,920	98.4	108.0
Colombia	8,140	3,849	12,845	4,070	15,000	4,827	84.3	25.4
Ecuador	1,175	450	2,575	670	2,465	602	109.8	33.8
Mexico	56,760	16,655	59,620	18,883	66,615	19,050	17.4	14.4
Peru	7,820	2,461	7,725	2,641	8,960	2,890	14.6	17.4
Uruguay	4,450	1,350	7,630	1,558	8,110	1,800	82.2	33.3
Venezuela	150,320	47,820	164,920	53,854	170,195	60,464	13.2	26.4
Central America								
El Salvador	—	—	—	—	2,220	...		
Guatemala	—	—	—	—	605	...		
Nicaragua	—	—	—	—	890	...		
Panama	—	—	—	—	8,745	...		
Antilles								
Barbados	—	—	—	—	160			
Cuba	13,815	...	13,815	...	13,815	...	0.0	...
Jamaica	—	—	—	—	4,195			
Netherlands Antilles	108,110	43,246	108,110	47,581	106,520	49,997	−1.5	15.6
Trinidad	28,935	10,988	47,855	16,566	49,285	18,110	70.3	64.8
Others	—	—	—	26		2,000		
TOTAL	448,033	149,870	520,885	175,512	573,955	198,077	28.1	32.2

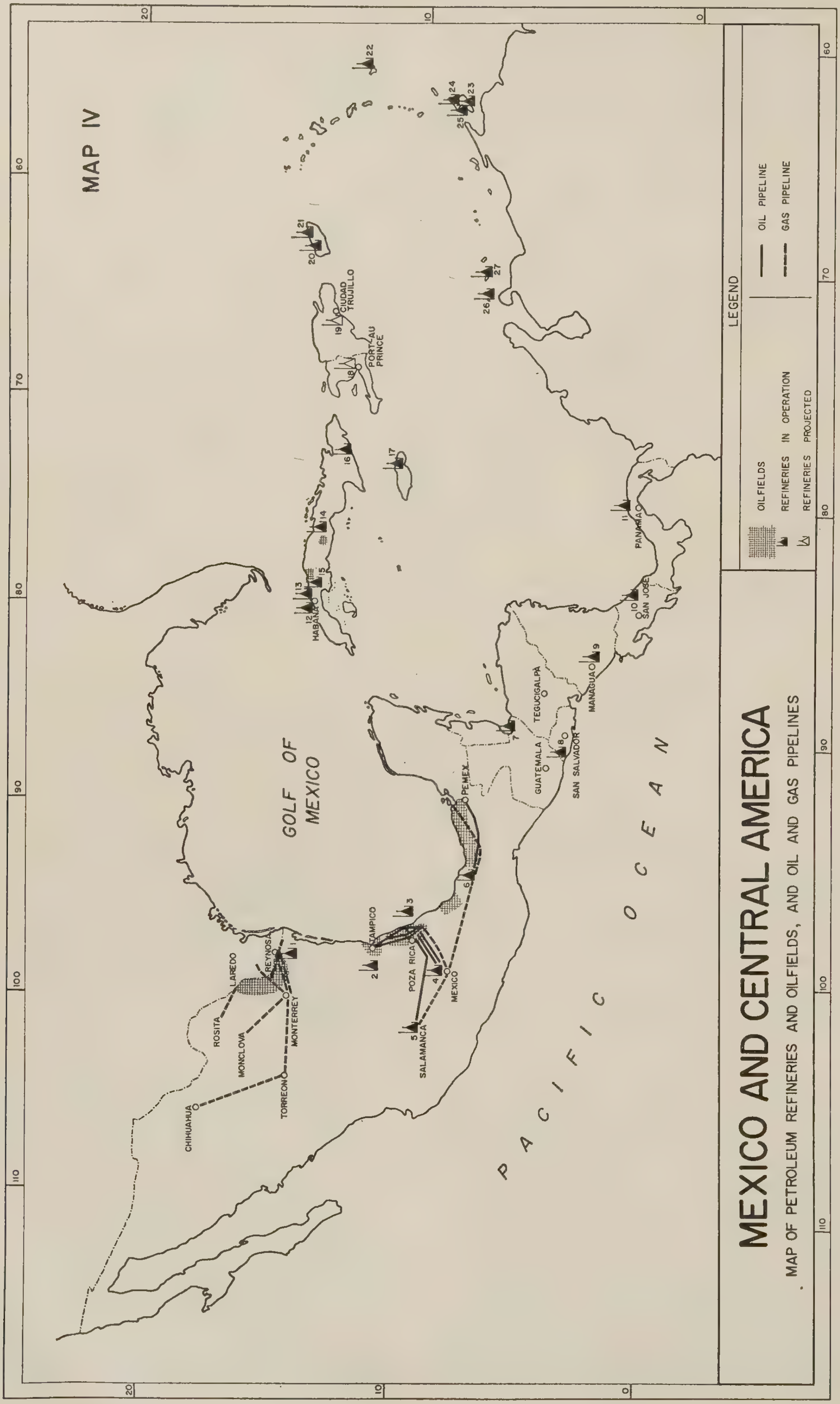
SOURCES: *Oil and Gas Journal* (various issues); Netherlands Antilles and Trinidad: *World Petroleum Statistics.*

[a] There are also projects for building new refineries or expanding those already in existence, namely:
Argentina: Shell refinery at Buenos Aires, expansion of 2,545 m³/day.
Brazil: Petrobras refineries at Belo Horizonte and Porto Alegre, 7,155 m³/day each.
Chile: ENAP refinery at Concepción, 5,725 m³/day (under construction).
Mexico: The PEMEX refineries in Salamanca, Minatitlan and Madero are to have their capacity enlarged by 6,360, 7,950 and 42,400 m³/day respectively.
Paraguay: Paraguaya S.A. refinery at Asunción, 1,590 m³/day.
Costa Rica: REFCOPET refinery at Puerto Limón, 795 m³/day.
Cuba: Refinery of 6,360 m³/day.
Dominican Republic: Cía. Refinadora Petrolera de Santo Domingo at Punta Torrecilla, 1,590 m³/day.
Guatemala: TEXACO Oil Co. refinery at Escuintla, 1,430 m³/day.
Venezuela: Morón refinery of the Corporación Venezolana de Petróleo, expansion of 795 m³/day.
El Palito refinery of the Mobil Oil Co., expansion of 2,545 m³/day.
Bajo Grande refinery of the Richmond Exploration Co., expansion of 3,656 m³/day.
Barbados: Refinery of Barbados Valor Oil Co., expansion of 480 m³/day.

[b] Estimate.

Although the individual Central American countries do not require enough petroleum products to justify the maintenance of a refinery on an adequate scale, they could together absorb the output of a refinery of efficient size at lower unit cost, thereby lowering the cost of the fuels they have to buy.

As regards the volume of crude currently refined, the Latin American countries as a whole show a fairly substantial increase. Brazil heads the list with an increment of 111 per cent during the quinquennium 1958–62 (from 7.839 million m³ to 16.518 million m³), largely owing to the construction of the first phase of the Duque de Caxias refinery. Venezuela pursues its upward trend, thanks to the expansion of existing refineries and an increase of 26.4 per cent in the volume of crude refined.



MAP IV

MEXICO AND CENTRAL AMERICA

MAP OF PETROLEUM REFINERIES AND OILFIELDS, AND OIL AND GAS PIPELINES

Uruguay, which does not produce any crude, raised its refinery output from 1.35 million m^3 in 1959 to 1.8 million m^3 in 1963, i.e., 33.3 per cent, while Mexico increased its own output by 14.4 per cent (see again table 131).

The ratio of domestic production of crude to the total volume refined in three Latin American countries is given in table 132.

Table 132. Producing and importing countries: Production of domestic crude petroleum in relation to the total volume refined

Country	1958			1960			1962		
	Production	Refining	Percentage	Production	Refining	Percentage	Production	Refining	Percentage
	Thousands of m^3			Thousands of m^3			Thousands of m^3		
Argentina	5,667	13,034	43.5	10,178	13,626	74.5	15,613	16,748	92.5
Brazil	3,008	7,839	38.4	4,708	10,412	45.2	5,310	16,518	32.1
Chile	885	1,275	69.4	1,150	1,727	66.6	1,858	2,481	74.9

SOURCE: ECLA, on the basis of official statistics.

In Argentina, where both refining capacity and the actual volume refined have increased, production has climbed at a much swifter pace. Consequently the refineries have been able to rely almost entirely on domestic crude for their supplies. In 1958 Argentina produced only 43.5 per cent of the crude it refined, but by 1960 it was already producing 75 per cent and by 1962 virtually the whole amount. Although Brazil's refinery output expanded by 111 per cent in 1958–62, production lagged behind (76.5 per cent) and, in 1962 it was producing only 32.1 per cent of the crude it refined as against 38.4 per cent in 1958 and 45.2 per cent in 1960. In Chile both production and refining have increased, but the former has gained slightly on the latter which means that in 1962 a larger proportion of its refining was based on domestic crude than in 1958.

In the countries that export crude, the proportion of crude petroleum refined also expanded in relation to production, i.e., an increasingly large amount of the crude produced is refined each year in the country (see table 133).

Table 133. Exporting and self-supplying countries: ratio of crude refined to crude produced petroleum

Country	1958			1960			1962		
	Refining	Production	Percentage	Refining	Production	Percentage	Refining	Production	Percentage
	Thousands of m^3			Thousands of m^3			Thousands of m^3		
Bolivia	375	546	68.7	359	569	63.1	425	464	91.6
Colombia	3,679	7,457	49.3	3,951	8,867	44.6	4,372	8,254	52.9
Mexico	15,129	16,000	94.6	17,028	17,293	98.5	18,802	19,326	97.3
Peru	2,523	3,114	81.0	2,630	3,014	87.3	2,862	3,101	92.3
Venezuela	42,466	151,160	28.1	51,339	165,613	31.0	59,507	185,684	32.0
Trinidad	5,939	8,808	67.4	6,716	13,091	51.3	7,718	17,391	44.4

SOURCE: ECLA, on the basis of official statistics.

The major increment took place in Bolivia where the amount of crude produced rose from 68.7 per cent in 1958 to 91.6 per cent in 1962—despite a temporary drop to 63.1 per cent in 1960. But in Bolivia, as in Peru, this improvement was due to a decline in production rather than to an expansion in refinery output. In Mexico both production and refining increased, although the former kept slightly ahead of the latter. Consequently, the proportion of domestic crude refined in 1962 was 97.3 per cent in comparison with 94.6 per cent in 1958. Colombia resembles Bolivia and Peru in that the increment in the proportion of crude refined between 1960 and 1962 (from 44.6 to 52.9 per cent) cancelled a decline of 10.7 per cent in domestic production. Venezuela maintains a ratio of approximately one to three between its refining and its production. Another third is refined on the islands of Aruba and Curaçao, and then exported in the form of derivatives, and a smaller quantity in Trinidad.[11] The remainder is exported as crude to various parts of the world. After enlarging its refineries in 1960, Trinidad began to import large quantities of light crude from the Middle East, thus limiting Venezuela's marketing possibilities in neighbouring areas. Argentina and Brazil have also imported from the Middle East.

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[11] Venezuelan crude is not exported to Aruba and Curaçao on the same terms as to Trinidad. In the former case Venezuela's earnings are based on the sales price after Aruba and Curaçao have refined the crude, whereas in the latter case its income depends entirely on the price of the crude itself.

3. CONSUMPTION

During the five years from 1958 to 1963 consumption of petroleum products and natural gas in Latin America increased by 32 per cent. In 1963 the largest consumers were Mexico, Argentina, Brazil and Venezuela, which together accounted for 80 per cent of total consumption. However, as regards rates of growth, Colombia stood out with a 50-per-cent increase, and Chile and Uruguay with 30 per cent each (see table 134).

Table 134. **Latin America: Consumption of petroleum products and natural gas**

(*Thousands of tons of petroleum equivalent of 10,700 Kcal/kg*)

Country	*1958*	*1960*	*1962*	*1963*[a]
Argentina	12,576[b]	12,768[b]	14,679[b]	15,321[b]
Bolivia	231	241	276	295
Brazil	10,177	11,916	13,654	14,924
Chile	1,930	2,179	2,518	2,800
Colombia	2,231	2,829[b]	3,353[b]	3,791[b]
Costa Rica	150	189	185	187
Dominican Republic	310	323	322	320
Ecuador	428	531	684[a]	736
El Salvador	182	195	213	243
Guatemala	383	460	472[a]	478
Haiti	93	86	100[a]	111
Honduras	195	198	222	235
Mexico	14,770[b]	15,248[b]	17,560[b]	19,372[b]
Nicaragua	198	178	193	208
Panama	480	344	323	330
Paraguay	80	103	121	125
Peru	2,019	2,234	2,728	3,039
Uruguay	1.135	1,185	1,570	2,150
Venezuela	9,989[b]	10,100[b]	10,830[b]	11,511[b]
TOTAL	57,557	61,613	70,001	76,076

SOURCE: ECLA, on the basis of official statistics.

[a] Estimate.

[b] Including natural gas.

Table 135. **Latin America: Consumption of petroleum products and natural gas**

(*Thousands of tons of petroleum equivalent of 10,700 Kcal/kg*)

Type of product	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*[a]
Gasoline	14,190	13,990	15,130	15,905	16,995	18,151
Kerosene	4,853	5,083	5,360	5,478	5,560	5,643
Diesel and gas oil	9,124	9,062	9,420	10,039	11,104	12,281
Fuel oil	21,714	21,796	22,745	22,916	22,962	23,008
Natural gas	7,676	8,606	8,658	10,560	13,380	16,993
TOTAL	57,557	58,537	61,313	64,898	70,001	76,076

SOURCE: ECLA, on the basis of official statistics. [a] Estimate.

Table 135 shows the trend followed by consumption of petroleum products in Latin America as a whole between 1958 and 1963, including natural gas in those countries which use it for fuel.

It will be noted that gasoline represents 23.8 per cent, kerosene 7.4 per cent, diesel and gas oil 16.1 per cent, fuel oil 30.2 per cent and natural gas—which increased by over 120 per cent as a substitute for fuel oil—22.3 per cent.

Kerosene registered a moderate rate of growth because of its partial replacement by gas and electricity, while the increase in gasoline consumption was no greater because of the failure of the motor vehicle park to grow sufficiently. A vigorous expansion is noted in intermediate petroleum products (diesel and gas oil); this was in keeping with the world trend, and derived partly from the change-over to diesel engines for rail transport and for a large amount of heavy motor vehicle traffic, and partly from the installation of light plants.

In table 136 a comparison is made between domestic consumption of various petroleum products and of natural gas in 1958 and 1962, by countries.

The foregoing outlines the present situation and recent evolution of hydrocarbons in Latin America. It now remains to indicate how far consumption is supplied from domestic sources and how far it depends on imports, in terms of crude petroleum and its derivatives.

Table 137, in which a comparison is made between the position of the relevant items in 1958–59 and in 1962–63, has been prepared for the purpose. It will be noted that the changes were highly favourable on the whole in that a larger measure of self-sufficiency was achieved as regards petroleum products and, in the case of the producing countries, crude petroleum as well. However, in some of these countries, particularly Brazil, domestic demand expanded more rapidly than the extraction of crude, so that the import coefficient tended to become larger rather than smaller.

Consumption of petroleum products by countries displayed the same trend. Where natural gas is produced on a commercial scale, it is replacing fuel oil, whose consumption is declining not only in relative terms but also in volume, while that of natural gas continues to expand vigorously.

4. FOREIGN TRADE

The Latin American countries can be divided into two categories according to the role they play in world petroleum trade: (*a*) those that barely satisfy their own needs or have to import; and (*b*) those that are self-sufficient or are normally exporters. The balance of Latin America's imports and exports of crude petroleum and petroleum products is shown in table 138.

Latin America's imports of these items have diminished owing to the higher degree of self-sufficiency attained by some countries, especially Argentina in respect of crude.

This country has virtually disappeared from the importing market. As regards petroleum products, the reduction of imports in Brazil, Argentina and Mexico has notably affected the over-all figures. If Argentina is excluded, purchases of crude rose from 11 to 15 million tons, while those of petroleum products dropped from nearly 8 to just over 4 million tons.

While Latin America's imports of crude petroleum and petroleum products declined as a whole in 1958–63, the reduction in the latter was far more marked than in the former because of the boom in refining. Since the majority of the Latin American countries are not petroleum producers, imports of crude naturally increased (see table 142).

Table 136. Latin America: Consumption of petroleum products and natural gas
(*Thousands of tons of petroleum equivalent of 10,700 Kcal/kg*)

Country	*1958*					*1962*				
	Gasoline	*Kerosene*	*Diesel and gas oil*	*Fuel oil*	*Natural gas*	*Gasoline*	*Kerosene*	*Diesel and gas oil*	*Fuel oil*	*Natural gas*
Argentina	2,116	1,339	2,407	5,963	751	2,758	1,487	2,827	5,039	2,568
Bolivia	80	32	34	85		104	47	54	71	
Brazil	3,502	596	2,039	4,040		4,322	626	2,956	5,750	
Chile	510	198	258	964		738	257	405	1,118	
Colombia	1,004	207	384	636		1,366	251	520	765	451
Costa Rica	53	8	68	21		61	14	95	13	
Dominican Republic	105	14	71	120		85[a]	17[a]	—	220[a]	
Ecuador	170	32	89	137		280[a]	44[a]	110[a]	250[a]	
El Salvador	80	27	22	53		68	36	55	54	
Guatemala	127	23	74	159		109	52	87	224	
Haiti	40	2	—	51		35[a]	3[a]	—	62[a]	
Honduras	45	7	76	67		46	13	76	87	
Mexico	3,287	1,392	1,572	5,214	3,305	3,632	1,493	2,101	4,495	5,839
Nicaragua	63	18	117	—		66	18	109	—	
Panama	187	36	109	148		144[a]	33[a]	...	146	
Paraguay	37	10	13	20		42	18	11	50	
Peru	744	306	486	483		855	444	574	855	
Uruguay	284	168	181	502		283	208	260	819	
Venezuela	1,756	438	1,124	3,051	3,620	2,001	499	864	2,944	4,522
TOTAL	14,190	4,853	9,124	21,714	7,676	16,995	5,560	11,104	22,962	13,380

SOURCE: ECLA, on the basis of official statistics.

[a] Estimate.

The increase in exports of crude petroleum and petroleum products was due primarily to the expansion that took place in Venezuela. Table 138 omits Aruba and Curaçao, which re-export crude in the form of petroleum products, and Trinidad, because it produces only 44 per cent of the petroleum it refines, thereby becoming a re-exporter of the balance.

Latin America's share of net world exports of crude and petroleum products can be seen in table 139.

It should be noted that there was a marked contraction in Latin America's share of these exports, although their volume actually expanded. In this, a part was played by the influx of crude from other parts of the world, especially the Middle East, whose share rose from 40.6 per cent in 1958 to 54.1 per cent in 1962. The contribution of each Latin American country to imports or exports of crude petroleum and petroleum products in the quinquennium 1958–62 is set out in table 140.

The bulk of Latin America's exports of petroleum products consists of fuel oil, mainly for the United States and Canada. Diesel and gas oil, which are of secondary importance in this branch of exports, are nearly all sent to European markets. Table 141 shows the composition of Latin America's exports of petroleum products, which remained approximately the same throughout the period under review.

If the volume of petroleum products is expressed in terms of the crude needed to obtain them and related to the amount of crude imported, it will be seen that significant modifications took place in several countries. For example, the relevant import coefficient changed between 1958 and 1962 from 0.38 to 1.46 in Argentina, from 0.80 to 0.09 in Brazil and from 2.95 to 1.35 in Chile.

The decline in imports of petroleum products was due primarily to the reduction in purchases of fuel oil. This is the main product of Latin American refineries owing to the low cost of the installations required, in contrast to the United States where the refineries are designed first and foremost for gasoline production (see table 143).

From the standpoint of both imports and exports, the question that most exercises the Latin American countries is the availability of foreign exchange. In the first case, domestic production of crude petroleum or its derivatives is being encouraged in order to save the foreign exchange drained away by imports of petroleum fuels. Measures in this direction have recently been taken in Argentina, Brazil and Chile. In the second, the producer countries are endeavouring to increase their exports in order to earn more foreign exchange. Venezuela is an exception, since it is trying to lessen its dependence on petroleum exports, but without reducing its export income in absolute figures.

Table 137. Latin America: Presen

(*Thousands of tons c*

Groups of countries	*Average*							
	Crude petroleum				*Consumption of petroleum products*		*Net*	
	1958–59		*1962–63*				*1958–59*	
	Production	*Refining*	*Production*	*Refining*	*1958–59*	*1962–63*	*Crude petroleum*	*Petroleum products*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A) *Self-sufficient or exporting*								
Bolivia	430	298	399	354	226	283	—	—
Colombia	6,947	3,393	7,760	4,000	2,300	3,001	—	—
Ecuador	385	335	329	509	434	752[a]	—	102
Peru	2,512	2,253	2,737	2,411	2,081	2,814	—	—
Venezuela	143,503	41,528	172,116	55,186	6,460	6,404	—	—
Mexico	14,766	14,302	17,698	16,922	11,459	11,960	—	—
Trinidad and Tobago	5,600	8,908	6,970	15,976	354	700[a]	3,308	—
Aruba and Curaçao	—	38,017	—	44,433	1,939	2,172	38,017	—
SUB-TOTAL	174,143	109,034	208,009	139,791	25,253	28,086	41,325	102
(B) *Producing and importing*								
Argentina	5,740	11,558	13,986	15,536	13,358	14,556	5,818	2,471
Brazil	2,909	7,088	4,712	14,352	10,221	13,977	4,179	3,874
Chile	782	1,104	1,622	2,092	2,017	2,619	322	902
SUB-TOTAL	9,431	19,750	20,320	31,980	25,596	31,152	10,319	7,247
(C) *Non-producing*								
Cuba	38	3,687	14	...	3,037	3,900[a]	3,840	414
Paraguay	—	—	—	—	84	124	—	84
Uruguay	—	1,196	—	1,582	1,221	1,610	1,611	276
SUB-TOTAL	38	4,883	14	...	4,342	5,634	5,450	774
Central America, Surinam, British Guiana and other parts of the Antilles	—	—	—	—	3,000[c]	3,685[a,c]	309	2,691
Latin America	183,612	133,667	228,343	173,353[d]	58,191	68,557	57,404	10,814

[a] Estimate.

[b] Owing to the fluctuations in crude petroleum imports, the ratios (2)/(5) and (4)/(6) have been used instead of (7)/(5) and (9)/(6).

Table 138. Latin America: Petroleum trade, 1958[a]

(*Thousands of tons*)

	1958		*1962*		*1963*[b]	
	Crude	*Petroleum products*	*Crude*	*Petroleum products*	*Crude*	*Petroleum products*
Exports	105,822.2	29,545.5	120,874.2	44,014.4	123,090.1	48,473.7
Imports	18,326.6	10,509.9	17,843.2	5,872.7[c]	17,669.0	5,521.5
Net exports	87,495.6	19,035.6	103,031.0	38,141.7	105,421.1	42,952.2

SOURCE: ECLA, on the basis of official statistics.

[a] Excluding Trinidad and Tobago, Aruba and Curação.

[b] Estimate.

[c] Including an estimate for Cuba.

Table 144 compares the figures for petroleum with the total figures for imports and exports in respect of a certain number of Latin American countries.

The three leading importers of crude petroleum and petroleum products in 1958 had, by 1962, considerably reduced the share of these imports in the total value of their purchases abroad. The cases of Argentina and Chile are particularly interesting, since the reduction there was due to an actual decline in the volume of purchases, whereas in Brazil it reflected the substitution of crude for petroleum products. In any case, in 1962 the three countries devoted a measure of their foreign exchange receipts to imports of crude petroleum and petroleum products, although at the same time they were obliged to spend more foreign exchange on imports of equipment, payments to corporations, etc.

Of the group of exporting countries, Mexico's petroleum exports accounted for a higher proportion of its total sales in 1962 than in 1958. Colombia's and Venezuela's sales of crude and petroleum products, on the other hand, dropped proportionally. The situation in Colombia is attributable to the decline in exports of petroleum products and crude in absolute terms; those of Venezuela, on the contrary, increased substantially

tuation and evolution of hydrocarbons
etroleum equivalent)

imports		Percentage variation 1962–63 / 1958–59					Average (percentage)					
1962–63		Crude petroleum		Petroleum products	Imports		Refining 1958–59	Refining 1962–63	Imports of crude 1958–59	Imports of crude 1962–63	Imports of petroleum products 1958–59	Imports of petroleum products 1962–63
Crude petroleum	Petroleum products	Production	Refining	Consumption	Petroleum	Petroleum products	Consumption (2)/(5)	Consumption (4)/(6)	Consumption (7)/(5)	Consumption (9)/(6)	Consumption (8)/(5)	Consumption (10)/(6)
(9)	(10)											
—	—	−7.2	18.8	25.2	—	—	131.8	125.1	—	—	—	—
—	—	11.7	17.9	30.5	—	—	147.5	133.3	—	—	—	—
—	50[a]	−14.5	51.9	73.3	—	−51.0	77.2	67.7	—	—	23.5	6.6
—	—	8.9	7.0	35.2	—	—	108.3	85.7	—	—	—	—
—	—	19.9	32.9	0.0	—	—	642.8	861.7	—	—	—	—
—	—	19.9	18.3	4.4	—	—	124.8	141.5	—	—	—	—
9,006	—	24.5	79.3	97.7	172.2	—	2,156.4	2,282.3	934.5	1,286.5	—	—
44,433	—	—	16.9	12.0	16.9	—	1,960.6	2,045.7	1,960.6	2,045.7	—	—
53,439	50[a]	19.4	19.0	11.2	29.3	−51.0	431.8	497.8	163.6	190.3	0.4	0.2
1,550	698	143.6	34.4	9.0	−73.3	−71.7	86.5	106.7	43.5	10.6	18.5	4.8
9,640	695	62.0	102.5	36.7	130.7	−82.1	69.3	102.7	40.9	69.0	37.9	5.0
470	675	107.4	89.5	29.8	46.0	−25.2	54.7	79.9	16.0	17.9	44.7	25.8
11,660	2,068	115.4	61.9	21.7	13.0	−71.5	77.2	102.6	40.3	37.4	28.3	6.6
...	...	−63.2	...	28.4[a]	...	...	121.4	...	126.4	...	13.6	...
—	124	—	—	47.6	—	47.6	—	—	—	—	100.0	100.0
1,850	92	—	32.3	31.9	14.6	−66.7	97.9	98.3	97.9[b]	98.3[b]	22.6	5.7
...	...	−62.3	...	29.7	...	...	112.4	...	125.5	...	17.8	...
390	3,295[a]	—	—	22.8	26.2	22.4	—	—	10.3	10.6	89.7	89.4
67,339[d]	5,629[d]	24.4	29.7	17.8	17.3	−47.9	229.7	252.9	98.6	96.7	18.6	8.2

[c] Including crude petroleum consumption.

[d] Excluding Cuba.

Table 139. Latin America: Share of world petroleum trade
(*Thousands of m³/day*)

Year	Net exports Latin America	Net exports World	Percentage
1948 . .	183.4[a]	380.9	48.1
1958 . .	330.7	1,078.3	30.7
1962 . .	439.4	1,681.7	26.1

Source: ECLA, on the basis of official statistics.

[a] Estimate.

and the relative reduction is due to an improvement in other export branches and to Venezuela's determined efforts to lessen its dependence on petroleum exports.

Argentina, Brazil and Chile buy mainly from Venezuela, although Argentina, which has become more self-sufficient, has recently been able to withdraw from the importer market, and crudes from the Middle East have been entering Brazil.

Crude petroleum from Colombia, Mexico and Venezuela is chiefly sold in the United States. Most of the petroleum products are exported to the United States and Europe, the principal item—fuel oil—being sent to the former, while Europe constitutes the chief market for diesel and gas oil.

World market prices for crude and petroleum products fell appreciably in the last five years because of potential over-production. Surplus tanker capacity was also available, which tended to reduce maritime transport costs. The cuts in freight charges have lessened the geographical advantage enjoyed by Venezuelan crude in its natural markets in the Western hemisphere, where it has been replaced to some extent by cheaper crude from the East. Brazil, for instance, in common with Trinidad, Canada and the United States, is being increasingly supplied with crude from the Middle East.

Although posted prices for Venezuelan crude have remained at the same level since 1960, the price at which it is actually sold (realization price) has been much lower because of the discounts granted. In fact, the realization price of Venezuelan crude dropped by 18.5 per cent in 1958–62, while that of petroleum products fell even more sharply (24.1 per cent). The downward trend in world petroleum prices has made it possible for Brazil to obtain its petroleum at an increasingly low unit cost, thereby achieving a considerable saving in foreign exchange.

Earlier in this section Latin America's imports and exports were divided into the two categories of crude petroleum and petroleum products. Table 145 makes a more detailed analysis of imports and exports of petroleum products in the major countries, by types. It shows the sharp reduction in fuel oil purchases by the main

Table 140. Latin America: Exports of crude petroleum and petroleum products, by country[a]
(*Thousands of tons*)

Country	1958		1962		1963[b]	
	Crude	Petroleum products	Crude	Petroleum products	Crude	Petroleum products
Argentina	—	—	254.4	540.7	270.0	600.0
Bolivia	152.3	17.0	84.8[c]	—	70.0	—
Brazil	1,144.0	185.9	297.5	77.1	290.0	60.0
Colombia	3,414.0	649.5	3,206.0	591.6	3,900.0	400.0
Ecuador	92.8	—	23.4	—	20.0	—
Mexico	114.5	1,551.0	1,056.5	1,634.3	1,070.0	1,680.0
Peru	320.6	379.9	368.2	253.3	376.8	132.2
Venezuela	100,584.0	26,762.2	115,583.4	40,917.4	117,093.3	45,601.5
TOTAL	105,822.2	29,545.5	120,874.2	44,014.4	123,090.1	48,473.7

SOURCE: ECLA, on the basis of official statistics.

[a] Excluding Trinidad and Tobago, Aruba and Curaçāo.

[b] Estimates, except for Mexico, Peru and Venezuela.

[c] 1961.

Table 141. Latin America: Exports of petroleum products, by type
(*Thousands of tons*)

Type of product	1958		1962		1963[a]	
	Volume	Percentage	Volume	Percentage	Volume	Percentage
Gasoline	1,833.3	6.2	2,507.1	5.7	2,763.0	5.7
Kerosene	463.1	1.5	1,766.5	4.0	1,987.4	4.1
Diesel and gas oil	5,307.7	17.6	6,890.2	15.7	7,561.9	15.6
Fuel oil	21,941.4	74.7	32,851.6	74.6	36,161.4	74.6
TOTAL	29,545.5	100.0	44,014.4	100.0	48,473.7	100.0

SOURCE: ECLA, on the basis of official statistics.

[a] Estimate.

Table 142. Latin America: Imports of crude petroleum and petroleum products, by country
(*Thousands of tons*)

Country	1958		1962		1963[a]	
	Crude	Petroleum products	Crude	Petroleum products	Crude	Petroleum products
Argentina	6,655.3	2,311.0	1,115.4	1,492.6	1,000.0	1,200.0
Bolivia	0.7	9.9	14.6	9.5	15.0	9.4
Brazil	5,652.5	4,076.7	9,961.2	820.1	10,000.0	800.0
Chile	336.2	899.1	562.5	688.2	570.0	650.0
Colombia	16.9	47.8	—	162.1	—	170.0
Costa Rica	21.2	124.2	10.4	164.3	10.0	170.0
Cuba	3,943.8	414.0	3,800.0[a]	400.0[a]	3,800.0	400.0
Dominican Republic	—	336.2	—	296.7	—	290.0
Ecuador	3.0	18.6	—	45.7	—	50.0
El Salvador	52.6	119.5	53.7	154.1	54.0	160.0
Guatemala	162.8	213.0	211.8[b]	240.2[b]	220.0	245.0
Haiti	—	91.9	—	86.0	—	85.0
Honduras	66.6	123.2	104.2[c]	128.1[c]	110.0	130.0
Mexico	—	927.8	—	91.3	—	80.0
Panama	—	309.5	—	318.3	—	320.0
Paraguay	—	78.9	—	120.3	—	125.0
Peru	—	169.9	99.4	565.3	100.0	570.0
Uruguay	1,415.0	238.5	1,910.0	89.8	1,790.0	67.0
Venezuela	—	0.2	—	0.1	—	0.1
TOTAL	18,326.6	10,509.9	17,843.2	5,872.7	17,669.0	5,521.5

SOURCE: ECLA, on the basis of official statistics.

[a] Estimate.

[b] 1960.

[c] 1961.

Table 143. Latin America: Imports of petroleum products, by type

(*Thousands of tons*)

Type of product	*1958*		*1962*		*1963*[a]	
	Volume	*Percentage*	*Volume*	*Percentage*	*Volume*	*Percentage*
Gasoline	2,048.5	19.5	1,256.1	21.4	1,105.0	20.0
Kerosene	724.3	6.9	987.9	16.8	935.2	16.9
Diesel and gas oil	2,428.5	23.1	1,475.7	25.1	1,395.6	25.3
Fuel oil	5,308.6	50.5	2,153.0	36.7	2,085.7	37.8
TOTAL	10,509.9	100.0	5,872.7[b]	100.0	5,521.5	100.0

SOURCE: ECLA, on the basis of official statistics.

[a] Estimate.

[b] Including an estimate for Cuba.

Table 144. Latin America: Value of imports and exports of petroleum and petroleum products in relation to total imports and exports in six countries

(*Thousands of dollars*)

Country	*1958*			*1962*		
	Petroleum and petroleum products	*Total*	*Percentage*	*Petroleum and petroleum products*	*Total*	*Percentage*
Imports						
Argentina	209,489	1,232,600	16.0	67,805	1,351,900	5.0
Brazil	262,804	1,352,900	19.4	206,066	1,475,000	13.9
Chile	56,364[a]	414,100[a]	13.6	23,381	511,600	4.6
Exports						
Colombia	76,706	460,700	16.6	68,821	463,300	14.9
Mexico	22,128	732,400	3.0	38,610	929,300	4.2
Venezuela	2,297,411	2,321,400	98.9	2,342,718	2,593,600	90.3

SOURCE: ECLA, on the basis of official statistics. [a] 1959.

Table 145. Latin America: Imports and exports of petroleum products, by type in six countries

(*Thousands of tons*)

Country	*1958*				*1962*			
	Gasoline	*Kerosene*	*Diesel and gas oil*	*Fuel oil*	*Gasoline*	*Kerosene*	*Diesel and gas oil*	*Fuel oil*
Imports								
Argentina	54	174	661	1,422	70	410	961	52
Brazil	965	309	1,122	1,681	419	239	38	124
Chile	51	138	62	649	7	49	73	559
	1,070	621	1,845	3,752	496	698	1,072	735
Exports								
Colombia	—	—	—	650	—	—	57	535
Mexico	4	—	75	1,547	3	—	10	1,621
Venezuela	1,736	368	5,120	19,538	2,479	1,741	6,604	30,094
TOTAL	1,740	368	5,195	21,735	2,482	1,741	6,671	32,250

SOURCE: ECLA, on the basis of official statistics.

Latin American importers, in particular Argentina and Brazil. A fairly marked decline can also be noted in imports of diesel, gas oil and gasoline, especially by Brazil. The increase in exports is directly accountable to Venezuela.

5. EXPLORATION AND DRILLING

Of all petroleum activities, exploration and drilling are the best indicators of the state of the industry and its future rate of expansion. Since the continued existence of the petroleum industry depends in the long run on the discovery of new oilfields, the cessation of exploration is tantamount to the cessation of future petroleum production.

Table 146. Latin America: Geophysical activities, by country
(*Crew/months*)

Country	*1959*	*1960*	*1961*	*1962*
Argentina	355	389	350	411
Bolivia	166	83	42	24
Brazil	317	265	187	191
British Honduras or Belize	12	16	2	—
Chile	60	64	70	81
Colombia	107	59	37	77
Guatemala	29	6	4	—
Mexico	264	248	255	250
Peru	50	34	20	20
Trinidad and Tobago	6	3	7	5
Venezuela	102	9	7	3
Others	10	4	6	45
TOTAL	1,478	1,180	987	1,107

SOURCE: *World Oil*, 15 August of each year.

In 1959–62, geophysical activities in general experienced a decline of 25 per cent in Latin America in terms of crew/months. This does not necessarily mean a proportional reduction in the area covered, since there is no linear relationship between the two variables. Bolivia, Brazil and Venezuela witnessed the sharpest reductions, while Argentina and Chile were the only countries to register an increase. In Venezuela geophysical activities virtually came to a standstill, since they declined by 97 per cent during the period in question (see table 146).

A great deal of the geophysical activity in Latin America takes the form of seismic exploration. This gives an idea of the amount of knowledge that has been acquired on existing geological formations (see table 147).

Table 147. Latin America: Geophysical activities, by type
(*Percentage*)

	1959	*1960*	*1961*	*1962*
Gravity	25.9	22.0	19.0	18.6
Magnetic	—	2.1	1.0	0.7
Seismic	74.1	75.9	80.0	79.2
TOTAL	100.0	100.0	100.0	98.5[a]

SOURCE: ECLA, on the basis of statistics in *World Oil*, 15 August of each year.

[a] "Other methods" account for 1.5 per cent.

The purpose of geophysical activities is to make it possible to embark upon the more advanced stage of exploration, that is, the drilling of exploratory wells. During the period under review, the drilling of exploratory wells in Latin America remained at much the same level, but with fluctuations and a tendency to decline (see table 148). Generally speaking, the Latin American countries maintained approximately the same rate of drilling, except for Venezuela, which registered a fairly sharp fall, and Argentina, which progressed enormously. In the next few years exploratory activities in Argentina may be curtailed because of the cancellation of the petroleum contracts, whereas in Venezuela they may be intensified since the Government is apparently disposed to welcome contracts that do not involve concessions to private companies, through the Venezuelan Petroleum Corporation.

Table 148. Latin America: Exploratory wells completed

Country	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*	*1964*[a]
Argentina	33	...	121	84	130	111	71
Bolivia	9	12	18	14	13	13	19
Brazil	56	92	95	76	70	76[b]	86[b]
Chile	20	19	11	14	19	14	22
Colombia	32	31	36	39	20	54	34
Ecuador	3	6	8	4	—	1	7
Mexico	76	81	103	106	84	60	87
Peru	14	3	21	26	25	25	32
Venezuela	168	103	62	77	69	54	55[c]
TOTAL	411	353	475	440	430	408	413

SOURCES: *Petroleum Press Service*, October 1963; Chile, Mexico and Venezuela: ECLA, on the basis of official statistics; 1964: *Petróleo Interamericano*, April 1964.

[a] Programme estimates.

[b] Estimate.

[c] Own estimate.

In 1963, 13 per cent of the drilling derricks in operation throughout the world were engaged in exploration and development activities in Latin America, that is, about 340 altogether. Mexico has nearly 40 per cent, followed by Argentina and Brazil with 20 and 15 per cent, respectively, and by Venezuela and Trinidad with 6 per cent each.

Table 149. Latin America: Exploratory wells completed and total number of wells drilled, 1962

	Exploratory wells completed	*Total number of wells drilled*	*Exploratory wells as percentage of total*
Argentina	111	1,022	11
Bolivia	13	53	25
Brazil	76[a]	179[a]	42
Chile	14	95	15
Colombia	54	107	50
Cuba	5[a]	24[a]	21
Ecuador	1	30	33
Mexico	60	554	11
Peru	25	146	17
Trinidad and Tobago	17	236	7
Venezuela	54	498	11
Others	—	3	—
TOTAL	430	2,947	15

SOURCE: *Petróleo Interamericano*; Chile, Mexico and Venezuela: ECLA, on the basis of official statistics.

[a] Estimate.

Generally speaking, 15 per cent of the wells in Latin America are of an exploratory kind. As regards individual countries, Argentina, while only devoting 11 per cent of its drillings to exploration, had the highest level of exploratory activities in the last few years in absolute terms; from a percentage standpoint, however, it ranked as one of the lowest because of the large number of wells that have been drilled there (see table 149).

In 1962, Argentina had 26 per cent of the total number of wildcat wells in Latin America. If the five countries with the highest level of exploratory drilling in Latin America are considered (Argentina, Brazil, Colombia, Mexico and Venezuela), it will be seen that this group as a whole accounts for 83 per cent of the total number of completed wildcat wells. The relation between completed wells of this kind and the increase in petroleum reserves determines the development of a country's petroleum industry.

Once new oilfields have been discovered, drilling is divided into semi-exploratory and development drilling. Development wells are those drilled within a proven area for the development and extension of reservoirs, while semi-exploratory wells are those drilled with the same end in view, but outside the proven area. The aim of both types of activity is to discover and develop oil-bearing areas. It is of the utmost importance for a producing country to know as much as possible about its hydrocarbon deposits, since this will enable it to make long-term plans based on an estimate of the income obtainable from the development of this resource. The volume of petroleum reserves can provide an index of the most suitable rate of exploitation for each country, while estimates of the magnitude and duration of the reserves can be used as a yardstick for framing a sound exploration or development policy.

Table 150. Latin America: Number of wells drilled, by country

Country	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*	*1964*[a]
Argentina	390	577	1,050	1,620	1,286	1,022	452
Bolivia	36	30	43	39	48	53	68
Brazil	140	229	233	241	177	179[b]	185
British Honduras or Belize	6	2	—	—	—	—	—
Chile	74	90	56	85	111	95	127
Colombia	174	219	173	110	94	107	117
Cuba	61	11	3	22	20	24[b]	22
Ecuador	42	29	77	75	22	30	50
Mexico	379	440	762	729	639	554	651
Paraguay	1	—	—	—	—	—	—
Peru	138	65	150	156	143	146	135
Trinidad and Tobago	295	278	315	288	280	236	219
Venezuela	1,190	692	444	477	536	498	521
Others	9	19	12	7	8	3	3
TOTAL	2,935	2,671	3,318	3,849	3,364	2,947	2,550

SOURCES: *World Oil*, 15 August of each year; Chile, Mexico and Venezuela: ECLA, on the basis of official statistics; 1964: *Petróleo Interamericano*, April 1964.

[a] Programme estimates.

[b] Estimate.

Broadly speaking, the number of wells drilled in Latin America increased by 4 per cent in the period 1958–63. Venezuela again registered a sharp decline when its total drillings were reduced by 58 per cent. Colombia also registered a marked reduction, equal to 39 per cent over the quinquennium. Argentina, Mexico and Chile recorded substantial increments, in particular Argentina, where drillings increased by 162 per cent during the period (see table 150).

It is important for the reserves of an oil-bearing area to keep ahead of production, in terms of both volume and rate of increase. In this way their theoretical duration can be extended. If the output of an area were to expand more rapidly than its reserves, the duration of the latter would be shortened, and the result would be an obligatory curtailment of production over the medium term and the complete depletion of hydrocarbons over the long term.

Table 151. Latin America: Petroleum reserves and reserves-production ratio in selected countries

(*Thousands of m³*)

Country	1959			1961			1963		
	Reserves	*Production*	*Theoretical duration of reserves (years)*	*Reserves*	*Production*	*Theoretical duration of reserves (years)*	*Reserves*	*Production*	*Theoretical duration of reserves (years)*
Argentina	318,000	7,083	44.9	270,300	13,431	20.1	365,700	15,204	24.1
Bolivia	14,946	504	29.7	23,850	475	50.2	31,800	511	62.0
Brazil	39,750	3,757	10.6	63,600	5,534	11.5	47,700	5,339	8.9
Chile	10,335	1,022	10.1	19,080	1,473	12.9	31,800	2,099	15.2
Colombia	119,250	8,516	14.0	159,000	8,467	18.8	143,100	9,691	14.8
Cuba	413	31	13.3	318	21	15.1	—	12	—
Ecuador	3,816	439	8.7	3,975	465	8.5	3,975	384	10.4
Mexico	397,500	16,814	23.6	390,345	18,572	21.0	397,500	20,003	19.9
Peru	51,675	2,868	18.0	47,700	3,083	15.5	60,420	3,325	18.2
Trinidad and Tobago	67,575	6,506	10.4	67,515	7,276	9.3	79,500	7,770	10.2
Venezuela	2,703,000	160,803	16.8	2,684,000	169,442	15.8	2,705,000	188,482	14.4
TOTAL	3,726,260	208,347	17.9	3,729,743	226,239	16.5	3,866,495	252,820	15.3

SOURCE: Reserves: *Oil and Gas Journal*, 1959 and 1963, last weekly issues; *World Oil*, 15 August 1961. Production: ECLA, on the basis of official statistics.

This is precisely what happened in Latin America in 1959–63. Although in aggregate terms reserves increased far more than production, the latter expanded at a rate of 21 per cent and reserves at only 4 per cent. Consequently, the theoretical duration of the reserves decreased from 17.9 years in 1959 to 15.3 years in 1963, and would have been even less if the production figures taken as a basis of reference were not those for 1963 but the average for the period in which the proven reserves up to that year would theoretically have become exhausted.

Table 151 shows the trend of growth for Latin America's petroleum reserves and relates it to the volume of production by countries, thereby furnishing an index for the "theoretical duration of reserves".

The "theoretical duration of reserves" is a static index, showing the number of years a country can sustain its existing volume of production, without discovering fresh reserves. However, as both reserves and production fluctuate, the theoretical duration cannot be more than an indication of a country's production potential at a given moment. As a rule, the two factors increase, but it should be remembered that reserves are calculated solely on the basis of the volume considered to be recoverable at the time, without reference to possible revisions and extensions, new discoveries, or increases in the recovery index due to secondary or tertiary methods of recovery. The latter is vital, since a wide margin of increase is given to reserves when a higher recovery index is used. In any case, the relation between the two coefficients of increase is important and it should be made an operational rule to keep reserves ahead of production.

Chapter VII

HOUSING

A. INTRODUCTION

The characteristic features of the series of changes in the housing situation and in housing policies and programmes that took place during the period 1960–63 may be grouped under the following five heads: (*a*) the housing situation reached a crisis, owing to the rapid growth, first in the Latin American capitals and subsequently in the primate cities, of shanty towns (*barriadas, favelas, callampas, villas miserias* or *cantigriles*), where large population groups congregated, so that community service requirements were concentrated in areas that were very difficult to supply and the expected development of urban centres was distorted; (*b*) at Bogotá and Punta del Este the Governments took cognizance of the urgency and complexity of the housing problem and recognized the need to adopt national housing programmes specifically designed to tackle it on integrated and continuing lines, in the context of economic and social development; (*c*) sources of external financing were created, which provided liberal and timely support for the formation of national funds to finance housing through the tapping of savings and the mobilization of new resources; (*d*) methodological concepts and principles for the formulation of national housing programmes were studied and propounded (among them, the adoption of statistical indicators of levels of living in respect of housing, evaluation of shortages, preparation of estimates of minimum requirements, assessment of resources and establishment of targets), a contribution thus being made to the solution of conceptual problems that had been seriously hampering the preparation of national housing plans; and (*e*) within the period in question, housing censuses were taken in fourteen countries, national housing surveys were carried out in three, and the process of obtaining census findings was speeded up through advance tabulation of sample census schedules in nine countries.

B. CHANGES IN THE HOUSING SITUATION IN 1960–63

The changes in the housing situation that took place in 1960–63 can be assessed, although only indirectly and partially, on the basis of the following statistical data: (*a*) comparative census findings for recent years, especially in the period 1950–60; (*b*) estimates of the spread of shanty towns, based on special studies carried out in the countries concerned; (*c*) trends in the volume of residential building; and (*d*) estimates of cumulative deficits. These four lines of approach are followed in the present study.

1. CHANGES IN THE HOUSING SITUATION REVEALED BY RECENT CENSUSES RELATING ESPECIALLY TO THE PERIOD 1950–60

The available data suggest that the total number of housing units of all kinds increased in proportion to the growth of the population. But an essential requisite for the appraisal of changes in living conditions where housing is concerned is that census information should include the classification of housing units in groups indicative of their structural characteristics. Only in the case of a few countries are such classifications available. It is particularly important to know the number of "private conventional (permanent) dwellings",[1] i.e., of houses and apartments or flats, for these are the housing units that are considered structurally adequate, since they are specially designed and constructed to accommodate private households. It is also of interest to ascertain the number of "improvised" housing units, in *barriadas, favelas, callampas,* etc., inasmuch as they represent a specific aspect of the housing problem. Unfortunately, census data on these two housing categories are available only for a very few countries (see table 152).[2]

The lack of adequate census data precludes knowledge of the changes in the housing situation registered in all parts of the region. But the following figures give some idea of the possible situation in certain countries. In Chile, the number of houses and flats or apartments rose from 764,000 units in 1952 to 973,000 in 1960, that is, by approximately 26,000 units per annum. These new units absorbed 86 per cent of the population increment in the intercensal period; the remainder, i.e., 14 per cent of the population increment, went to swell the number of occupants of "collective", "improvised" and other such housing units. Thus it was that the number of "*conventillo* rooms, *ranchos, rucas* and huts" (including *callampas* or shanty towns) increased from 130,000 units in 1952 to 196,000 in 1960, the number of their

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[1] See the definition of this type of housing unit recommended by the United Nations in *General Principles for a Housing Census* (Sales No.: 58.XVII.8), paragraph 304.

[2] In recent years, housing censuses have been taken in the following countries: Argentina (1947 and 1960); Brazil (1950 and 1960); Chile (1952 and 1960); Costa Rica (1949 and 1963); Dominican Republic (1950, 1955 and 1960); El Salvador (1950 and 1961); Mexico (1950 and 1960); Panama (1950 and 1960); and Venezuela (1950 and 1961). In addition, in Honduras and Peru housing censuses were taken in 1940 and 1961, but not in 1950. It has not been possible, however, to clarify the changes that took place during the intercensal period in several of these countries, in some instances because the findings of the last census are not yet to hand, in others because different concepts have been used, and in yet others for want of tabulations whereby changes in the housing situation can be evaluated.

Table 152. Latin America: Total population, urban and rural, percentages of population living in houses and apartments, number of persons per private housing unit and average number of persons per room, about 1960. Estimated housing deficits in about 1960–63

Country and year	Population						Density of occupancy						Housing deficits				
	Thousands of persons			Percentage living in houses and apartments			Number of persons per private housing unit			Number of persons per room			Source	Year	Thousands of private housing units		
	Total	Urban	Rura	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural			Total	Urban	Rural
Argentina																	
1960	20,956	14,161	6,795	...	...	...	...	...	...	...	...	...	[1]	1955	1,200	...	...
1947				...	...	...	4.4	...	...	2.2	...	...	[2]	1961	...	1,000	...
Bolivia																	
1960	3,696	1,104	2,592	...	...	...	...	...	...	...	...	...	[3]	1963	400	...	...
1950				...	...	...	...	5.0	...	...	...	...					
Brazil																	
1960	70,309	27,702	42,607	...	...	...	...	...	...	...	...	...	[4]	1960	8,000	...	...
1950				...	...	...	5.1	4.9	5.3	1.1	...	...					
Chile																	
1960	7,627	4,801	2,826	74	...	...	5.4	...	...	1.7	...	...	[5]	1962	454	304	150
1952				71	66	77	5.2	4.9	5.8	...	...	...					
Colombia																	
1960	15,468	7,134	8,334	...	...	...	...	...	...	...	...	...	[2]	1962	...	279[a]	...
1951				...	...	...	5.8	6.4	5.6	2.7	...	...	[6]	1951	800	300	500
Costa Rica																	
1960	1,206	456	750	...	...	...	...	...	...	...	...	...	[7]	1963	108	35	73
1949				...	...	...	...	5.0	...	...	1.3	...	[8]	1961	94	33	61
Cuba																	
1960	6,797	3,709	3,088	...	...	...	...	...	...	...	...	...	—	...	...	...	...
1953				...	...	...	4.6	4.2	5.4	...	...	...					
Dominican Republic																	
1961				...	...	...	5.1	4.9	5.2	...	...	...	[9]	1963	206	59	147
1960	3,030	924	2,106	...	...	...	...	...	...	...	...	...					
1955				...	55[b]	...	...	...	...	1.7	1.3	1.9					
Ecuador																	
1962				48	...	...	5.1	5.5	5.0	...	...	...	[2]	1960	571	203	368
1960	4,317	1,499	2,818	...	...	...	...	...	...	...	...	...	[10]	1950	360	...	...
El Salvador																	
1961				...	...	...	...	5.1	...	...	2.6	...	[2]	1960	...	60	...
1960	2,442	795	1,647	...	...	...	...	...	...	...	...	...	[11]	1950	337	149	188
1950				34	59	20	...	5.0	...	...	2.9	...					
Guatemala																	
1960	3,765	1,167	2,598	...	...	...	...	...	...	...	...	...	[12]	1962	558	108	450
1949				40	65	20	...	5.4	...	...	3.1	...	[13]	1950	435	35	400
Haiti																	
1960	4,140	523	3,617	...	...	...	...	...	...	...	...	...		...	...	...	...
1950				...	...	...	4.5	...	...	...	...	...					
Honduras																	
1961				...	...	...	5.7	...	...	2.5	...	...	[14]	1961	209	41	168
1960	1,950	438	1,512	...	...	...	...	...	...	...	...	...					
1949				68	80	62	5.6	5.6	5.6	3.0	2.0	3.8					
Mexico																	
1960	36,018	19,306	16,712	...	...	...	5.4	5.7	5.2	2.9	2.5	3.3	[2]	...	...	1,100	...
1950				...	...	...	4.9	...	...	...	...	...					

Nicaragua																
1960	1,477	501	976	...	...	...	...	...	...	...	...	...	[14]	1960	157	58	99
1950				...	...	...	5.9	5.4	6.2	...	...	...					
Panama																	
1960	1,055	433	622	...	...	...	4.9	4.6	5.1	3.2[c]	2.9[c]	3.4[c]	[15]	1960	118	36[d]	82
1950				...	39	...	4.5	4.0	4.8	2.5[e]	2.2[e]	2.7[e]	[15]	1950	...	...	76
Paraguay																	
1960	1,768	597	1,171	...	...	...	...	...	...	...	...	...	[16]	1961	160	21[f]	139
1950				...	...	...	5.4	5.4	5.5	...	...	...					
Peru																	
1961				75	...	...	4.9[g]	4.7[g]	5.0[g]	2.1	1.8	2.5	[17]	1961	825	371	454
1960	10.098	3,618	6,480	...	...	...	...	...	...	...	...	...	[18]	1956	729	327	401
Uruguay[h]																	
1963	2,556	2,131	425	92	96	70	3.3	3.7	3.7	...	0.8	...	[19]	1962	100	40	60
1960	2,491	1,765	726	...	...	...	...	...	...	...	...	...					
Venezuela																	
1961				63	...	...	5.3	...	...	1.6	...	...	[14]	1961	675	575	100
1960	7,331	4,521	2,810	...	...	...	...	...	...	...	...	...					
1950				53	76	27	5.3	5.3	5.4	...	...	...					
Latin America																	
1960	205,941	95,154	110,787	...	...	...	...	...	...	...	...	...	[20]	1961	...	14,000	...
													[21]	1951	19,449	4,282	15,167

Sources:

Population. Total, urban and rural population: estimates prepared by the ECLA Social Affairs Division, December 1963. Percentage living in houses and apartments: ST/ECLA/CONF.9/L.10.

Density of occupancy. Number of persons per housing unit and number of persons per room: ST/ECLA/CONF.9/L.10; several reports on national housing censuses; United Nations, *Statistical Yearbook*, 1960–1962; Inter-American Statistical Institute (IASI), *El censo de América, Noticieros* Nos. 1–84.

Housing deficits:

[1] ECLA, *Desarrollo económico de Argentina, 1959*, United Nations publication, Sales No.: 59.II.G.3, vol. 1, p. 36.

[2] Inter-American Development Bank, *Social Progress Trust Fund. Second (1962) and Third (1963) Annual Reports.*

[3] Instituto Nacional de Vivienda de Bolivia, *Vivienda*, Official bulletin, La Paz, February 1963, Year 1, No. 1, p. 6.

[4] ECLA/BNDE/29.1.1964.

[5] Corporación de la Vivienda (CORVI), *Plan Habitacional Chile*, p. 7.

[6] Instituto de Crédito Territorial, *Una política de vivienda para Colombia*, First National Seminar on Housing, 1955.

[7] Instituto Nacional de Vivienda y Urbanismo de Costa Rica (INVU), *Informe del Seminario sobre programación en vivienda*, Mexico, 1963.

[8] IA-ECOSOC, *Desarrollo Económico y Social de Costa Rica*, Report submitted by the Government of Costa Rica, *Parte VII: Vivienda* (OEA/Ser.H/X.4, CIES/313), 26 August 1963.

[9] IA-ECOSOC, *Desarrollo Económico y Social de la República Dominicana*, report by the Government of the Dominican Republic, *Parte VII: Vivienda* (OEA/Ser.H/X.4; CIES/326), 9 September 1963.

[10] Junta Nacional de Planificación y Coordinación Económica, Quito, Ecuador.

[11] United Nations Technical Assistance Programme, *Estudio sobre la Vivienda en El Salvador* (ST/TAA/K/El Salvador 9), New York, 1950.

[12] IA-ECOSOC, *Desarrollo Económico y Social de Guatemala*, report submitted by the Government of Guatemala, *Parte VII: Vivienda* (OEA/Ser.H/X.4; CIES/318), 5 September 1963.

[13] Anatole Salow, *Housing in Guatemala*, Pan American Union, Washington D.C., October 1950.

[14] IA-ECOSOC, *Resúmenes de los Informes Nacionales de los Países Latinoamericanos sobre su Desarrollo Económico y Social*, 1962 (OEA/Ser. H/X.4; CIES/342), 17 September 1963.

[15] Instituto de Vivienda y Urbanismo (IVU), *Menoria a la Asamblea Nacional* 1962–1963, Panama, 1963.

[16] IA-ECOSOC, *Desarrollo Económico y Social del Paraguay*, report submitted by the Government of Paraguay, *Parte VII: Vivienda* (OEA/Ser.H/X.4; CIES/324), 13 September 1963.

[17] Banco Central de la Reserva del Perú, *Plan Nacional de Desarrollo Económico y Social del Perú 1962–1971*, vol. 1.

[18] Comisión para Reforma Agraria y Vivienda, *Informe sobre la Vivienda en el Perú*, Lima, 1958.

[19] IA-ECOSOC, *Desarrollo Económico y Social del Uruguay*, report presented by the Government of Uruguay, *Parte VII: Vivienda* (OEA/Ser.H/X.4; CIES/327), 12 September 1963.

[20] IDB, *El BID y la vivienda*, August 1961, p. 1.

[21] IA-ECOSOC, *Problems of Housing of Social Interest*, Pan American Union, Washington D.C., 1954.

Note: Some of the totals are not consistent with the partial figures, owing to rounding.

[a] In population centres of 1,000 inhabitants and over.

[b] Relates to 1950.

[c] Excluding housing units of indigenous inhabitants.

[d] 53,615, according to Inter-American Development Bank, *Social Progress Trust Fund. Third Annual Report 1963.*

[e] Excluding 2,140 housing units for which the density of occupancy is unknown, 2,554 not divided into rooms, and those of indigenous inhabitants.

[f] Only in Asunción.

[g] Including housing units that were closed at the census date. Estimated on the basis of the number of occupants per housing unit.

[h] Provisional estimates based on the findings of a national housing sample. Any grouping of ten or more houses was classified as "urban".

occupants rose from 645,000 to 1,044,000, and the percentage of the population inhabiting housing units in this category went up from 10.9 in 1952 to 14.2 in 1960 (see table 153).

In Venezuela the number of houses and apartments increased from 456,000 units in 1950 to 804,000 in 1961, i.e., by approximately 32,000 units yearly. These new units provided accommodation for 1,990,000 inhabitants, representing 81 per cent of the population increase in the intercensal period. As in the case of Chile, the remainder of the population increment augmented the number of occupants of collective dwellings (hotels, rooming and boarding-houses, etc.) and marginal housing units. Hence the number of *ranchos* also grew between 1950 and 1961, from 409,000 to 478,000, and that of their occupants from 2,143,000 to 2,488,000. Proportionally, however, the situation improved, since the percentage of the population living in *ranchos* fell from 45.8 in 1950 to 34.6 in 1961.

Table 153. Increase in number of housing units and occupants (population) in intercensal period: Chile, 1952–60, and Venezuela, 1950–61

Category or type of housing unit	*Thousands of housing units*		*Number of occupants (population)*				*Number of occupants per housing unit*		*Intercensal increase*			
									Number of housing units		*Number of occupants*	
			Thousands	*Percentage*	*Thousands*	*Percentage*	*Number of units*		*Thousands*	*Per thousand inhabitants (total) per annum*[a]	*Thousands*	*Percentage of total population*
Chile												
	1952	*1960*	*1952*		*1960*		*1952*	*1960*		*1952–1960*		
Total	1,091	1,336	5,933	100.0	7,352	100.0	5.4	5.4[b]	245	4.4	1,419	100.0
Private family housing units												
Group I	764	973	4,200	70.8	5,421	73.7	5.5	5.6	209	3.8	1,221	86.1
Group II[c]	158	156	647	10.9	670	9.1	4.1	4.3	−1	−0.0	23	1.6
Group III	130	196	645	10.9	1,044	14.2	5.0	5.3	67	1.2	399	28.1
Collective housing units[c]	40	10	441	7.4	217	2.9	10.9	21.2	−30	−0.5	−224	−15.8
Venezuela												
	1950	*1961*	*1950*		*1961*		*1950*	*1961*		*1950–1961*		
Total number of housing units occupied	876	1,354	4,674	100.0	7,147	100.0	5.3	5.3	478	6.3	2,472	100.0
Group I	456	804	2,482	53.1	4,475	62.6	5.4	5.6	348	4.6	1,993	80.6
Group II	...[d]	56	...[d]	...	184	2.8	...	3.3	56	0.7	184	7.4
Group III	409	494	2,143	45.8	2,488	34.6	5.2	5.0	85	1.1	345	14.0
No indication given	11	...[d]	50	1.1	...[d]	...	4.7	...	−11	−0.1	−50	−2.0

Note:
Group I. Chile: One-family house or apartment; Venezuela: House or *quinta*, or apartment.
Group II. Chile 1952: Apartment or room in a house; 1960: Apartment or room in a house, *casa de cité*, room in a factory, school, workshop, etc. Venezuela: Apartment, room in a house, etc.
Group III. Chile: *Conventillo* room, rustic housing unit (*rancho, ruca* or hut), improvised housing unit (*callampa*); Venezuela: *Rancho, locales* (small shops with living accommodation).

[a] In relation to the population of the country as at 30 June 1956.

[b] Private housing units only (excluding collective housing units).

[c] Apparently intercensal data are not comparable in these groups.

[d] This category was not used in the 1961 census.

In neither of the two countries considered above was the increase in the number of conventional (permanent) dwellings commensurate with the population increment, and in both the number of marginal housing units rose considerably in absolute terms, so that the housing shortage was aggravated and the cumulative backlog became bigger still. Nevertheless, it must be taken into account that comparison of census data is misleading in some respects, as is indicated in a footnote to table 153, although the basic conclusion appears to be sound.

In Honduras the total number of housing units of all kinds rose from 213,000 in 1949 to 325,000 in 1961, but among these, units "with walls of wattle and wooden struts" also increased from 39,000 to 56,000, which shows that in this country too the volume of construction of houses and apartments was insufficient to accommodate the population increment.

With regard to the supply of piped water and the quality of the building materials in existing housing units, some improvement was registered. Thus, for example, the percentage of housing units with piped water increased in Chile from 48.1 in 1952 to 56.1 in 1960; in El Salvador, from 39.8 in 1950 to 76.8 in 1961; in Honduras, from 10.1 in 1949 to 25.1 in 1961; in Mexico, from 17.1 in 1950 to 23.5 in 1960; in Panama, from 44.4 in 1950 to 45.2 in 1960; and in Venezuela, from 30.2 in 1950 to 47.7 in 1961.[3]

To sum up, in countries for which is has been possible to compare the findings of two housing censuses, roughly within the period 1950–60, it can be seen that the increase in the number of conventional (permanent) dwellings was insufficient in relation to the population increment, whereas the number of improvised and rustic housing units rose considerably. Appreciable progress, however, was observable in the supply of piped water to existing housing units in the six countries for which data are available.

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[3] These figures are not comparable from one country to another owing to variations in the basic concepts used. For further information on the nature and limitations of these statistics, see *Compendium of Social Statistics*, United Nations publication, Sales No.: 63.XVII.3, pp. 270 and 278–280.

2. GROWTH OF SHANTY TOWNS

The most striking aspect of the housing problem was the emergence or spread, in the primate cities, of large shanty towns, which came to take up a substantial proportion of the urban areas. It is estimated, for example, according to some sources,[4] that the population of the *favelas* in Rio de Janeiro, which had amounted to some 400,000 inhabitants in 1947, numbered 650,000 ten years later, and by 1961 had reached 900,000, representing approximately 38 per cent of the city's total population. At the same date, the occupants of *favelas* in Recife accounted for about 50 per cent of the total population of the town. According to another source, the 159,000 inhabitants of the State of Guanabara living in 58 *favelas* in 1950 had increased by 1960 to 337,000, occupying 146 *favelas*. Information from the same source[5] indicates that the proportion they represented of the total population of the State rose from 7.1 per cent in 1950 to 10.2 per cent in 1960. All sources agree that *favelas* spread considerably during the fifties in the Rio de Janeiro area.

In Colombia, the four cities most affected by the expansion of *tugurios* would seem to be Barranquilla, Buenaventura, Cali and Cartagena, and it is estimated that in Buenaventura 80 per cent of the population lives in such areas.[6] In Chile the proportion of the population living in *conventillo* rooms, *ranchos*, *rucas*, huts and the like apparently increased from 10 per cent in 1952 to 14 per cent in 1960, according to the censuses taken in those years (see again table 153). In Peru, the population of the *barriadas* of Lima, which in 1940 had represented about 10 per cent of that of the whole city, would seem to have constituted 21 per cent by 1961. In some of the other cities of Peru, the corresponding proportion is even higher, reaching 70 per cent—the peak figure—in Chimbote, and 40 per cent in Arequipa.[7] In Mexico, D.F., 14 per cent of the population lived in *colonias proletarias* in 1952; and in the case of Uruguay, on the basis of a nation-wide housing sample, it is estimated that *conventillos*, *cantegriles* and *rancheríos* accounted for about 30,000 urban housing units, or approximately 100,000 inhabitants, at the beginning of 1963. Lastly, the 1950 census classified 17.4 per cent of the housing units in Caracas as *ranchos*, improvised units, and so forth.

These data are illustrative of the extreme seriousness of the present housing situation, and denote the most typical manifestation of the region's housing problem, which consists essentially in the lack of conventional (permanent) dwellings—i.e., houses and apartments or flats—for a very substantial proportion of the population. It is this characteristic that differentiates the housing problem in Latin America from its counterparts in most of the developed countries, inasmuch as large sectors of the region's population have not even a minimum standard of structurally satisfactory accommodation, and have been forced to improvise shelters and lodging of whatever sort they can, whereas in the industrialized countries almost the whole of the population occupy conventional dwellings, whether these are in a good or a bad state of repair. To solve the housing problem in Latin America, therefore, the primary need is to provide a minimum standard of satisfactory housing for those large sectors of the population which nowadays live in shanty towns.

3. TRENDS IN THE VOLUME OF RESIDENTIAL BUILDING, 1950–59 AND 1960–63

As the growth of the population takes place continuously, and usually at a rising rate, if a deterioration in the housing situation is to be prevented, residential building, once satisfactory minimum levels have been reached, must progressively increase in urban and rural areas (considered separately), at least at the same rate as the number of private households.

Available statistics on the construction of dwellings in Latin America indicate that house-building has not only failed to increase in the same proportion as the population of the major towns, but in some countries has actually followed a steady downward trend (see figure XXVI). In Argentina, for example, according to a study prepared by the Instituto de Investigaciones Económicas y Financieras of the Confederación General Económica (CGE), the number of housing units built per annum would seem to have decreased from a maximum of approximately 150,000, in about 1950, to some 55,000 in 1960. In 1961 an increase can be seen in relation to 1960, which apparently continued up to 1962.[8]

In the capitals of the Brazilian States, the level of total construction seems to have remained relatively stable from 1953 to 1960. Since the capital cities of Brazil registered large population increments, in the neighbourhood of 5 per cent per annum, between 1950 and 1960, it can only be supposed that the housing situation must have considerably deteriorated. In Colombia, building statistics for eighteen large towns, together with the statistics presented by the Instituto de Crédito Territorial, reveal a more satisfactory situation; residential building has been steadily increasing since about 1940, and this expansion has been stimulated to a very marked extent since 1960. It is noteworthy in Colombia's case that the housing units built by the Instituto de Crédito Territorial ("*soluciones habitacionales*") increased in number from 3,000 in the years immediately preceding 1960 to over 30,000 in 1962. The expansion of building through the intervention of the public sector has therefore been exceptional in Colombia. Costa Rica shows a situation

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[4] United Nations Educational, Scientific and Cultural Organization (UNESCO), *Urbanization in Latin America, 1962*; and Inter-American Development Bank (IDB), *Social Progress Trust Fund. First Annual Report, 1961*.

[5] Instituto Brasileiro de Geografia e Estatistica, Serviçio Nacional de Recenseamento, *Estado de Guanabara, Sinopsis Preliminar de Censo Demográfico, 1960*.

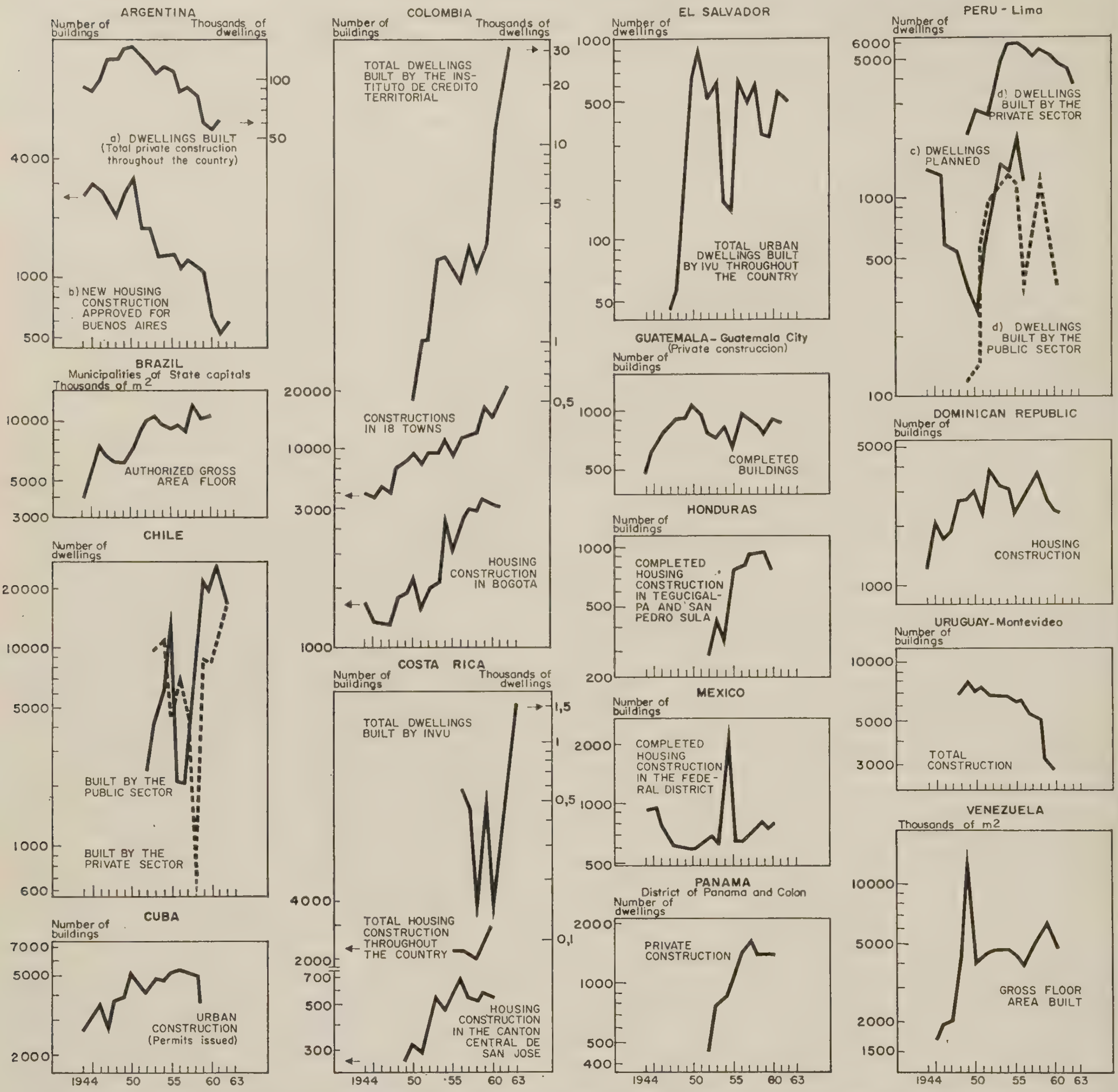
[6] Instituto de Crédito Territorial, *Plan de Erradicación de Tugurios*, Bogotá, April 1963.

[7] Junta Nacional de la Vivienda, *Informe de situación sobre vivienda, construcción y desarrollo urbano*, Lima, 1963 (provisional text).

[8] For the sources of the statistics cited, see figure XXVI.

Figure XXVI. Latin America: Housing construction in selected countries, 1944–63

Semi-logarithmic scale



SOURCES: Argentina: (1) Dirección Nacional de Estadística y Censos, *Anuario Estadístico de la República Argentina* and *Boletín de Estadística*; (2) Instituto de Investigaciones Económicas y Financieras de la CGE, *Programa Conjunto para el Desarrollo Agropecuario e Industrial*, Vol. IV, November 1962. Brazil: United Nations, *Statistical Yearbook*. Colombia: Departamento Administrativo Nacional de Estadística, *Anuario Estadístico de Bogotá*, and *Anuario Estadístico de Colombia*; Instituto de Crédito Territorial, *Informe al Ministro de Fomento*; and *Revista del Banco de la República*. Chile: CORVI, *Plan Habitacional Chile*. Costa Rica: INVU, *Informe al Seminario de Programación en Vivienda*, Mexico, 2–8 December 1963. Cuba: Dirección General de Estadística, *Anuario Estadístico de Cuba*. El Salvador: IVU, *Memoria 1959–60*. Guatemala: Dirección General de Estadística, *Guatemala en cifras*; Bank of Guatemala, *Boletín Estadístico*. Honduras: Dirección General de Estadísticas y Censos, *Anuario Estadístico 1960*. Mexico: Dirección General de Estadística, *Anuario Estadístico de los Estados Unidos de México*. Panama: United Nations, *Statistical Yearbook*. Peru: (1) United Nations, *Statistical Yearbook*; Dirección Nacional de Estadísticas y Censos, *Anuario Estadístico del Perú*; (2) and (3) Junta Nacional de la Vivienda, *Informe de la situación sobre vivienda, construcción y desarrollo urbano 1963*. Dominican Republic: United Nations, *Statistical Yearbook*. Uruguay: United Nations, *Statistical Yearbook*. Venezuela: United Nations, *Statistical Yearbook*.

similar to Colombia's, but on a smaller scale. The number of housing units built by the Instituto Nacional de Vivienda y Urbanismo, amounting to about 300 per annum up to 1960, had risen to over 1,800 by 1963. In Cuba, private urban building continued at very stable levels from 1950 to 1958, but a considerable decrease was registered in 1959. No data are available from 1960 onwards. The rate of residential building in the thirteen largest communes in Chile remained virtually stationary (the actual increase was about 1 per cent per annum) from 1940 to 1958. As from 1959, a very considerable increment in total building is observable throughout the country. According to official estimates, the total number of housing units built was about 8,000 in 1958, and in the subsequent years 32,000, 28,000, 39,000 and 35,000 respectively.[9] The increase in residential building in Chile and Colombia coincided with the entry into operation of national housing programmes.

Table 154. Central America: Population and residential building in capital cities, 1950–59

(Absolute figures in thousands)

Capital city	*1950*		*1959*		*Increase 1950–59*		*Annual rates of increase (percentage)*	
	Population	*Number of residential buildings erected*	*Population*	*Number of residential buildings erected*	*Population*	*Number of residential buildings erected*	*Population*	*Residential building*
Guatemala	284.3	31.7	400.0	34.2	116	2.5	3.9	0.8
San Salvador	162.0	20.9	268.0	21.8	106	0.9	517	0.5
Tegucigalpa	72.4	7.6	137.0	9.7	65	2.1	7.3	2.7
Managua	109.4	11.1	167.0	16.3	58	5.2	4.8	4.4
San José	109.7	12.1	200.0	17.2	90	5.1	6.9	4.0
Panama	127.9	18.9	269.0	19.4	141	0.5	8.6	0.3
TOTAL	865.7	102.3	1,441.0	118.6	576	16.3	5.9	1.7

SOURCE: Statistical Departments of the Central American countries.

Notes: Population. In some cases, the population figure may not exactly coincide with the official estimate, owing to the inclusion or exclusion of certain districts in the purlieus of the capital cities. *Housing units built.* This definition is applied to buildings used mainly for residential purposes, by one or more households. Each residential building may contain one or more housing units as defined in national censuses. No distinction is made, however, between permanent buildings and those of a temporary nature, such as *ranchos* (Guatemala), *ranchos colgados* (Panama), etc.

In the other countries for which statistics are available, residential building stood at relatively stable levels or declined. In Montevideo the downward trend was very marked, the number of buildings erected yearly having decreased from the average of approximately 7,000 registered in 1950 to a minimum of 2,800 in 1960. The average annual figure for urban areas in Uruguay seems to have fallen from 23,000 in 1955–59 to 18,000 in 1960–62, according to estimates derived from a nation-wide sample.

In a study prepared by the Mexico Office of ECLA, for the third meeting of the Housing, Building and Planning Sub-Committee of the Central American Economic Co-operation Committee, the conclusion was reached that in 1950–59 the population of the capital cities of Central America and Panama had increased at an annual rate of 5.8 per cent, while residential building had expanded only by 1.7 per cent yearly, so that the shortage must have been aggravated (see table 154).

Figure XXVI also shows that in all countries, without exception, the construction of dwellings, and consequently total construction, underwent sharp fluctuations from one year to another. Some of these fluctuations may be attributable to the methods used in recording statistics, but in many instances they are obviously real, and this is particularly true of the building activities of housing institutes. Variations in the volume of residential building assume huge proportions in the Latin American countries, and patently constitute a serious obstacle to the development both of the building industry and of all the subsidiary economic activities concerned. As very large contingents of workers find employment in building, the vicissitudes of this industry unquestionably affect a substantial proportion of the labour force, and it is therefore a very rational move on the part of Governments to try to stabilize the volume of building by means of the execution of long-term housing programmes.

From a study of the continuous statistical series available with respect to house-building, the following conclusions can be drawn: (*a*) the rate of residential building in 1960–63 remained unchanged or decreased in relation to the preceding ten years, except in Chile, Colombia and Costa Rica; (*b*) in the case of the primate cities in Argentina and of Montevideo, building statistics show a very considerable decline; (*c*) if the state of affairs reflected by the available statistics really exists, it can only mean that the housing situation must have substantially deteriorated, since there was a greater increase in the population, or more accurately in the number of private households, than in the new housing units built; (*d*) the contraction in the volume of residential building probably helped to aggravate the unemployment problem; and (*e*) the severe fluctuations in residential building from one year to another not only must have distorted the normal development of the building industry but may also have led to inflationary pressures and variations in the gross product.

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[9] Corporación de la Vivienda (CORVI), *Plan Habitacional Chile*, Santiago, Chile, 1963, p. 100.

It must be borne in mind, however, that the statistics on which the present analysis is based are very unreliable; as a general rule, they relate to the capital or to the primate cities, and in many instances the latest figure available corresponds to the year 1960. Only for one country was it possible to obtain data for 1963.

4. ESTIMATES OF CUMULATIVE HOUSING DEFICITS

The term "housing deficit" has been used in widely differing senses by the pertinent regional and national agencies in Latin America. Thus, for example, in a very comprehensive study published by the Pan American Union in 1954,[10] definitions are given of the "latent deficit", the "deficit due to deterioration" and the "demographic deficit". The latent deficit, according to the concept adopted by the Pan American Union, is the number of housing units in the national stock which should be replaced because their structural characteristics or state of repair make them unfit for habitation. The deficit due to deterioration indicates the number of housing units that will have to be replaced in the future on account of either natural deterioration, a change in the use to which they are put, demolition, destruction by disaster, or other causes. The demographic deficit represents the dwellings that will have to be built to accommodate the new households formed.

In the terminology used by the Statistical Office of the United Nations, the deficit due to deterioration and the demographic deficit are incorporated under the denomination "future housing requirements" and the latent deficit under that of "present requirements".[11]

At the Latin American Seminar on Housing Statistics and Programmes, held at Copenhagen, Denmark, in September 1962,[12] it was agreed to define as housing requirements the number of private conventional dwellings needed to replace the improvised housing units (*favelas*, etc.), multi-family units (*conventillos*, etc.), rustic units (huts, etc.) and the like, that were regarded as falling short of the standards established in each country, and, in addition, to accommodate the secondary families and other groups involuntarily sharing a housing unit ("doubling up").

The calculation of deficits in Latin America has as a rule been confined to replacement requirements in respect of housing units considered to be unsatisfactory from the standpoint of their layout and the building materials used. Table 152 presents estimates of the shortage at various dates relating to eighteen countries. The principles applied in formulating them have not been uniform, and generally speaking they reflect only the number of housing units that required replacement at the date of the last census. Thus, for example, in the estimates for 1951 prepared by the Pan American Union, the deficit, amounting to 19 million housing units, consisted in those "buildings that are not in keeping with human dignity and that should be demolished". In 1962 the aggregate shortage of urban housing in the region was estimated by the Inter-American Development Bank at about 14 million units.[13] Despite the limitations noted, these estimates are at one in suggesting not only that the existing deficits are substantial and must have increased during the past decade, but also that no country would be economically in a position to absorb its housing deficit over the short term. Consequently, housing policy must aim primarily at the prevention of an increase in the deficits (through the annual construction of a minimum number of houses and apartments), rather than at their elimination in the space of a few years, which would be impracticable.

5. CONCLUSIONS

The shortage of proper dwellings has been increasing in all the Latin American countries ever since 1950. Under the stimulus of external aid, the downward trend of housing levels was probably modified in 1960–64, but the time-lag in the publication of official statistics and the deficiencies by which they are characterized preclude a conclusive evaluation of the effect of this stimulus on the over-all trend observable since 1960. Nevertheless, in three countries—Chile, Colombia and Costa Rica—a striking increase in the number of housing units built with the intervention of the public sector was registered in 1960–63 (in Chile's case, as from 1959).

The few data available indicate that both in absolute figures and proportionally the housing problem became steadily worse during the fifties. In 1960–63, although the downward movement of the level of housing conditions became slower, the unfavourable trend that had prevailed in the previous decade was not completely halted.

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[10] Pan American Union, *Problems of Housing of Social Interest*, Washington, D.C., 1954.

[11] Statistical Office of the United Nations, *Proposed Methods of Estimating Housing Needs* (E/CN.3/274).

[12] *Report of the Latin American Seminar on Housing Statistics and Programmes*, United Nations publication, Sales No.: 63.II.G.14.

[13] IDB, *Social Progress Trust Fund, Second Annual Report, 196*

C. CHANGES IN HOUSING POLICY AND PROGRAMMES IN 1960–63. EVOLUTION OF CONCEPTS

The most surprising fact emerging from the analysis of the statistics relating to the housing situation and housing trends in the fifties is the tremendous disproportion between the increasing magnitude and gravity of the housing problem and the unambitious and timorous character of the efforts made to solve it. While it is true that few social problems have received more attention than the housing question, and that all Governments have adopted pertinent measures since the beginning of the century, and even earlier, this official action failed to stop the deterioration in the situation observable throughout the decade. Some measures, such as those providing for mortgage loans and for certain benefits obtainable under the social security systems, were deprived of their efficacy as a result of the inflationary trends prevailing in the region. Others were on a small scale and partial in their scope, and their results did not come up to expectations. Only in the middle of the decade did some Governments approach the task of outlining national housing programmes in a quest for an integrated and continuous solution, taking precise account of the requirements of the population as a whole and the country's over-all economic resources.

Of interest in this respect is the experience of Colombia and Chile, two countries which within Latin America can be regarded as forerunners in the search for integrated solutions to the housing problem. In Colombia, after many efforts which found expression in action of a general nature, a national housing plan was adopted in 1961 as part of the over-all economic and social development plan (Plan General de Desarrollo Económico y Social) 1961–65,[14] and its implementation has considerably increased the number of housing units built for the various social sectors.

In Chile, the concern aroused by the problem in question promoted the creation of a number of agencies as early as the first decade of the century, and these efforts culminated in the establishment of the present Housing Corporation (Corporación de la Vivienda—CORVI) in 1953. In 1959 Legislative Decree No. 2 was issued, bringing into force a national housing plan "designed to mobilize, channel and promote State and institutional resources, savings, and public and private credit for the benefit of low-cost housing",[15] which forms an integral part of the national economic development programme (Programa Nacional de Desarrollo Económico) 1961–70.[16]

The experience of Chile and Colombia is illustrative of trends very widely followed throughout the region with respect to housing policy. Public action to improve the housing situation began with feeble attempts to assist specific population groups by the creation of mortgage loan systems and the concession of tax exemptions. Credit lines were subsequently amplified, but the resources allocated to the problem were scanty in proportion to the magnitude of requirements. Only at the end of the fifties, and undoubtedly under the influence of international agreements, were adequate resources earmarked for housing and priority assigned to it as a vital aspect of development policy. The causes determining the tendency to defer integrated solutions are manifold, but a major share of the responsibility may reasonably be imputed to the following factors: (i) the anxiety of Governments to concentrate resources in the most productive economic activities; (ii) the emergence of new investment opportunities in the field of industry, which attracted investment that would have been traditionally placed in housing; (iii) the prevailing impression of the immensity of the existing housing shortages, combined with uncertainty as to the magnitude of the resources required to eliminate them and the possibility of laying hands on such funds; (iv) doubts as to the nature and efficacy of the new instruments of economic and social policy that would have to be applied in order to tackle the housing problem; and (v) the cultural and economic handicaps of the population, which at the beginning of the decade was still predominantly rural, and neither gave the housing problem the importance attributed to it by more developed peoples, nor had sufficient income to find its own solutions.

All these factors have undergone substantial modification. Although the basic concern for the acceleration of economic growth through the concentration of investment in the most productive activities still persists, the conviction has now been reached that it is indispensable for adequate funds to be allocated likewise to education, health and housing programmes, in order to make the improvement of living conditions, and economic growth itself, a possibility. It is further acknowledged that not only does residential building make a contribution to economic growth through the product of building activities and the value of the services rendered by the new housing units, but also these new dwellings do much to increase the productivity of their occupants, a fact which particularly affects the industries that are largely dependent on skilled labour. Another point now recognized is that for the construction of low-cost housing savings can be tapped and potential labour resources realized that could not be turned to account for other purposes. Lastly, in specific circumstances residential building enables advantage to be taken of existing facilities that are under-utilized.

The defeatist outlook on the housing problem has been superseded by a more optimistic attitude, in view of the recent experience of some of the countries of the region. Housing policy no longer aims at the short-term absorption of the existing deficits, which was an obviously impracticable objective; the target at present envisaged is the construction of a certain minimum number of dwellings, commensurate with the requirements determined by the formation of new private households and the gradual replacement of existing housing units. Thanks to this change of approach, feasible goals can now be pursued.

The rapid population shift from the rural areas to the towns necessarily brought in its train a considerable change in the living habits of the population, and, consequently, more stringent demands with regard to housing conditions. Indeed, in some instances the formation of shanty towns by "squatting" has been caused by the settlers' conscious aspiration towards higher levels of living.

Another important conceptual change has consisted in a reaffirmation of the ability of the Latin American population to produce savings for housing purposes. The experience of several countries during the period 1960–63 shows that even in present circumstances the populations of the region can set aside unexpectedly large sums for house purchase, when they are spurred on by the incentive of obtaining loans to that end, and that savings can be tapped for housing which could not have been used for other ends, new resources being thus created.

It was also seen in 1960–63 that under-utilized manpower can be turned to account through the efficacious application of self-help and mutual aid systems, which are now felt to open up substantial prospects for the solution of the housing problem in the future.

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[14] *Consejo Nacional de Política Económica y Planeación, Plan General de Desarrollo Económico y Social* (1961–65), Bogotá, December 1961.

[15] Corporación de la Vivienda (CORVI), *Plan Habitacional Chile*, op. cit., p. 3.

[16] Corporación de Fomento de la Producción (CORFO), *Programa Nacional de Desarrollo Económico* 1961–70, Santiago, Chile, 1961.

1. INTERNATIONAL AND REGIONAL ACTIVITIES IN THE FIELD OF HOUSING

The foregoing circumstances were taken into consideration by the Governments members of the Organization of American States at Bogotá,[17] in 1960, when they recommended the institution of an inter-American social development programme among whose objectives better housing and community services should be included. The Act of Bogotá was endorsed and amplified at Punta del Este,[18] where the Governments undertook to prepare emergency and long-term plans providing for the improvement of housing conditions and of the complementary services. The need to formulate national housing programmes was thus firmly established, and this gave rise to a series of activities on the part both of national and of regional and international agencies.

In June 1961, the President of the United States of America and the President of the Inter-American Development Bank (IDB) concluded an agreement whereby the latter agency took over the management of the Social Progress Trust Fund, which amounted to 394 million dollars,[19] and was to be used for contributing to the implementation of social development programmes, including housing for the lower-income groups. By this means, a source of external financing for the region's housing programmes was established. The situation thus underwent a radical change, since prior to 1960 there had been no possibility of external financing for housing programmes.

A Latin American Seminar organized by ECLA and the Government of Denmark was held in September 1962 at Copenhagen; the report of its proceedings constitutes a general guide for the programming of housing in Latin America.[20]

In October 1963, the Inter-American Economic and Social Council set up a Special Committee on Health, Housing and Community Development, composed of representatives of several countries, whose Housing Group held two meetings in 1963 at which the progress achieved in the preparation and execution of housing programmes was considered.[21] The task of this Group was to analyse the advances made, study the difficulties encountered in the preparation and implementation of national housing programmes in Latin America, and submit recommendations to IA-ECOSOC with a view to the encouragement and acceleration of the development of such programmes.

In addition to the Governments of the region, various universities and institutions and non-governmental agencies devoted themselves to the study of various aspects of the housing problem and to the search for solutions. Among their activities may be mentioned, for example, the symposium sponsored in 1962 by the Chase Manhattan Bank of New York;[22] the second and third inter-American congresses of the building industry (Segundo y Tercer Congreso Interamericano de la Industria de la Construcción), held at Mexico City in 1960,[23] and at Caracas in 1961; and a first inter-American meeting on savings and loans (Primera Reunión Interamericana sobre Ahorros y Préstamos) held at Lima in 1963.[24]

2. NATIONAL HOUSING PROGRAMMES AND INVESTMENT PLANS. REQUIREMENTS, OBJECTIVES AND ACHIEVEMENTS[25]

In conformity with the Charter of Punta del Este, the Governments of the region gave priority in 1960–63 to the formulation of over-all development plans, which included national housing programmes. In this task formidable difficulties were encountered, which were only partly overcome.

Housing programmes have to be prepared by a central authority, and their purpose is to establish targets for the construction of housing units within specific periods of time. They are aimed at determining and stabilizing investment in this field, which in Latin America has traditionally fluctuated between 2 and 6 per cent of the gross domestic product, and to this end recourse is generally had to the following instruments of action: tapping of savings for housing purposes; formation of a national fund; creation of tax incentives; promotion of cost reductions; mobilization of human resources; geographical distribution of resources; and so forth.

Given the large number of variables that have to be taken into account in the formulation of housing programmes, and the links between the building industry and the other sectors of the economy, it is essential for national housing programmes to be drawn up as part of the over-all economic development plans, so as to ensure maximum efficiency in the utilization of resources, and compatibility between the improvement of living conditions and the requirements of economic development, over the short and long terms.

Prior to 1960, very few countries possessed national institutions responsible for centralizing housing policy and co-ordinating decisions in connexion with the various factors affecting the problem, so that many institutions had to be established, expanded or merged. In 1960–63 housing institutions of nation-wide scope were created, to which were assigned the functions of developing and operating mechanisms for the financing of low-cost housing, and of promoting technological improvements at the various stages of the designing and execution of projects, in order to bring down costs, improve the quality of the buildings erected and develop the building industry. Thus, housing corporations, banks, institutes or councils were set up in several countries.[26]

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[17] Act of Bogotá, 12 September 1960.

[18] Special Meeting of the Inter-American Economic and Social Council at the Ministerial Level, *Charter of Punta del Este*, Uruguay, August 1961.

[19] Inter-American Development Bank, *Social Progress Trust Fund: First Annual Report, 1961*, Washington, D.C., 1962, p. 2.

[20] United Nations, *Report of the Latin American Seminar on Housing Statistics and Programmes*, op. cit.

[21] *Report of the First Meeting of Special Committee VI to IA-ECOSOC. Group: Housing* (OEA/Ser. H/XIII), 3 April 1963; and *Report of the Second Meeting of Special Committee VI to IA-ECOSOC. Group: Housing* (OEA/Ser. H/X.4), 9 September 1963.

[22] The Chase Manhattan Bank, *Housing in Latin America*, New York, July 1962.

[23] *Memoria del II Congreso Interamericano de la Industria de la Construcción*, Mexico City, 31 October to 6 November 1960.

[24] Inter-American Development Bank, *Primera Reunión Interamericana sobre Ahorros y Préstamos*, Lima, 20 to 25 January 1963.

[25] This section is based on data contained in the reports of the Social Progress Trust Fund for 1961, 1962 and 1963; on reports by Governments to IA-ECOSOC; and on information supplied directly to ECLA by housing institutes and banks.

Another difficulty that arose in connexion with the preparation of housing plans was the lack of comparability in basic statistics, especially as regards building, since these are prepared in accordance with many different principles, not always clearly established, and are puplished with a considerable time-lag. Nevertheless, the housing institutions did a great deal to improve internal statistics relating to their own activities, which enabled the public sector's contribution to the solution of the problem to be ascertained with greater accuracy.

Yet another serious obstacle was the lack of widely accepted methodological bases for programming in the housing sector, i.e., of standard concepts and methods for the allocation of resources to housing; for the evaluation of normative demand for housing and of the resources required to satisfy it; and for testing the compatibility of housing programmes with the rest of the national economy.[27]

Despite the difficulties noted, in 1960–63 national housing programmes were adopted,[28] as part of national development plans, in the following countries: Bolivia (1962–71); Chile (1961–70); Colombia (1961–65); Ecuador (1964–73); Peru (1962–71); and Venezuela (1963–66). Furthermore, short-term plans for investment in housing were financed in all the countries of the region, with the exception of Cuba, Haiti and Paraguay (see table 155).

The national programmes cited take very different forms and have reached very different stages of execution; the first to be put into effect were those of Chile and Colombia, and the most recent that of Ecuador, which will be developed over the period 1964–73.

Table 155. Latin America: National housing programmes and plans for public investment in housing adopted in 1960–63

Country	*National programmes*	*Public investment plans*	
	Period covered	*Period covered*	*External aid*
Argentina	(Under study)	1963–65	IDB/AID
Bolivia	1962–71	1963–65	IDB/AID
Brazil	—	1962...	IDB
Chile	1961–70	1962–64	IDB/AID
Colombia	1961–65	1961–65	IDB/AID
Costa Rica	—	1963...	IDB/AID
Cuba	...	...	...
Dominican Republic	—	1963...	IDB/AID
Ecuador	1964–73	1962...	IDB/AID
El Salvador	—	1962–64	IDB
Guatemala	—	1962...	IDB/AID
Haiti	—	...	—
Honduras	—	1962	IDB/AID
Mexico	—	1962–64	IDB/AID
Nicaragua	(Under study)	1961–64	IDB/AID
Panama	—	1961–65	IDB/AID
Paraguay	—	—	—
Peru	1962–71 (In process of revision)	1962–63	IDB/AID
Uruguay	(In course of preparation)	1963–64	IDB/AID
Venezuela	1963–66	1963–66	IDB/AID

Bolivia's programme has been only partly carried out to some extent because the resources that were expected to be channelled into building through the Instituto Nacional de Vivienda did not materialize in their entirety. For 1960, the institution in question budgeted for 12,000 million bolivianos and collected 3,500 million; for 1961, it estimated that its expenditure would be 9,252 million and its receipts amounted to 3,267 million,[29] or, in other words, only 35 per cent of the resources budgeted was available.

In Colombia, the 1961–65 plan envisaged the construction of as many urban housing units as it was estimated that new households would be formed every year. In 1961 approximately 38,000 units were built, and 45,000 households were formed. In 1962, the building target was 31,200 dwellings and the number erected was 31,900;[30] that is, the target established was slightly exceeded. No data are available for 1963.

The Chilean programme entered upon the second three-year phase of its execution (1962–64), and the longer period that it has been in force makes a more detailed analysis possible.

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[26] In the second annual report of the Social Progress Trust Fund, relating to the year 1962, an account is given of institutional progress in the field of housing from September 1960 to 31 December 1962.

[27] In 1962 a significant forward step in the development of standard methodological bases for programming was taken at the Latin American Seminar on Housing Statistics and Programmes, but the principles enunciated there have not yet been sufficiently widely disseminated.

[28] Including both housing units to be built through the direct or indirect intervention of the public sector and those that the private sector is expected to put up without state aid.

[29] Instituto Nacional de Vivienda de Bolivia, *Boletín Oficial VIVIENDA*, Year I, No. 1, February 1963, p. 2.

[30] Instituto de Crédito Territorial, *Informe al señor Ministro de Fomento para su Memoria al Congreso Nacional, 1962.*

Table 156 shows that the number of housing units built increased to a marked extent in the years when the first phase of the programme was in force (1960–62), in comparison with previous years; but in relation to what had been programmed with a view to satisfying minimum new housing requirements—44,500 urban and 9,400 rural units in 1961–70—the number of dwellings actually built[31] did not attain the minimum target established for urban construction. In 1962, building by the public sector was on a good deal smaller scale than had been projected, but the private sector surpassed the target of 16,000 urban units that had been assigned to it. The programme succeeded in raising the volume of residential building to a level two or three times as high as that attained in the ten years prior to its initiation; even so, the minimum required to stabilize the situation was not achieved, so that the process of deterioration in housing conditions was curbed but not completely halted.

Table 156. **Chile—urban areas: Estimates of housing requirements in 1961–63 and of numbers of housing units built by the public and private sectors in 1952–63**[a]

Year	*Urban housing requirements (Number of units)*[b]	*Housing units built*		
		Total	*Public sector*[c]	*Private sector*[d]
1952	35,500[e]	11,108	2,360	8,748
1953		14,286	4,279	10,007
1954		15,970	5,866	10,104
1955		18,253	13,828	4,425
1956		9,117	2,178	6,939
1957		6,902	2,095	4,807
1958		7,974	7,450	524
1959		31,840	22,731	9,109
1960		27,861	19,244	8,617
1961 .	42,100	38,887	26,552	12,335
1962 .	44,400	35,413	17,387	18,026
1963 .	48,000	—	—	—

[a] Data taken from Corporación de la Vivienda (CORVI), *Plan Habitacional Chile*, Santiago, 1963, p. 100.

[b] Requirements determined by the increase in the number of households, replacement of housing units no longer fit for habitation and rebuilding of the 58,700 units destroyed by the 1960 earthquakes.

[c] Comprises direct activities of CORVI, of the Instituto de Vivienda Rural and of the social security institutions.

[d] Comprising indirect activities of CORVI, savings and loan associations, bank loans, mortgages, owner-financed building, etc.

[e] ECLA estimate.

Although the number of housing units constructed in 1961–62 was not as large as had been programmed, it should be pointed out that in terms of floor space the established target was exceeded, which suggests that the units built were bigger and more costly than had been contemplated. These higher housing standards partly account for the failure to attain the numerical objective pursued.

Peru continued to implement its two-year immediate-action programme, comprising the construction of 35,000 housing units[32] in 1962–63, and financed by an IDB loan and a donation from AID. There is no information to hand on the development of this programme.

Venezuela's housing programme for 1963–66, which forms part of the national development plan (Plan de la Nación) for the same period, aims at increasing the construction of dwellings sufficiently to cope with natural demographic growth and eliminate the cumulative deficit in twenty years.

Under this programme, which envisages investment in housing to the amount of 19 per cent of total investment, 193,500 housing units are to be built in 1963–66 with the intervention of the public sector, and 61,500 by the private sector, i.e., some 255,000 housing units in four years, the great majority of which—approximately 74 per cent—are intended for the lower income sector. This level of activity should suffice to meet minimum requirements and absorb the backlog of dwellings unfit for habitation within twenty years. The programme was launched too recently for its development to be evaluated.

The short-term plans for investment in housing adopted in the other countries (see again table 155) are much less ambitious, since they cover only the building of housing units on the basis of direct intervention by the public sector, and, except in Brazil and Mexico, relate specifically to the construction of a given number of dwellings for which external financing is available. In Brazil, public activity to improve housing conditions is confined to the efforts of individual States, among which Guanabara's plans to provide housing for one million inhabitants of *favelas* deserve particular mention. The 1963 work programme of Costa Rica's Instituto Nacional de Vivienda y Urbanismo makes provision for the direct construction of 3,430 housing units and the granting of 244 loans. El Salvador has a two-year plan under way for the building of 2,500 dwellings per annum in 1962–64, financed with IDB loans. Concurrently, work has been proceeding on the preliminary studies for the formulation of a long-term national programme. In Honduras a two-year plan to build housing for the lower income groups (Plan Bienal de Construcción de Vivienda Popular 1962–64) is in force, and aims at the construction of 1,416 units. Under Mexico's short-term immediate-action programme (Plan de Acción Immediata 1962–64), about 12,000 low-cost housing units are to be built each year. The public sector constructed 8,132 dwellings in 1960–61 and 9,833 in 1961–62. Of these, 1,602 were built by the Instituto Nacional de la Vivienda.

In 1962 the Instituto Nicaragüense de la Vivienda embarked upon a plan for the building of 2,850 housing units, to be carried out in two years and financed with an IDB loan. The Instituto Nacional de la Vivienda (INVI) of the Dominican Republic put two major projects into execution, while medium and long-term programmes are being drawn up. Both are financed with AID loans. The first consists in the building of 1,160 housing units in 24 municipalities, and the second is a pilot project which comprises 70 dwellings and is designed to train personnel for the execution of mutual aid and self-help projects. Also in 1962, the Instituto Agrario Dominicano made a start upon the building of 3,000 housing units in rural communities, in collaboration with INVI. This project is financed by an IDB credit.

At the beginning of 1962, the Instituto Nacional de Vivienda Económica and the Banco Hipotecario of

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[31] Corporación de la Vivienda (CORVI), *Plan Habitacional Chile*, op. cit., p. 8.

[32] 40,000 according to the *Report of the First Meeting of Special Committee VI to IA-ECOSOC*, op. cit.

Uruguay drew up a short-term emergency plan for the co-ordination of projects already being carried out by various public bodies. The plan provides for the building of 4,100 houses in two years, is experimental in character, aims at benefiting the middle and lower income groups, and is financed by an IDB loan. It was put into operation in mid-1963, but its execution has been slow. Besides the above-named institutions, the Departmental Councils (Concejos Departamentales) of Montevideo and Soriano are also co-operating in the plan.

As has been shown, it is a characteristic common to all national housing programmes that they incorporate the activities of both the public and the private sector with a view to satisfaction of the total needs of the population. On the other hand, short-term or emergency investment plans have more limited objectives, as a rule relating merely to the building of large-scale housing projects through the agencies responsible for the plan (see table 157 and figure XXVII).

Table 157 presents a comparison of minimum annual needs in respect of new housing as estimated for 1960, with the national programme targets and investment plans in operation during the period 1960–63, and with the average number of dwellings built annually in recent years, while in figure XXVII this comparison is limited to the urban sector. In Bolivia, Chile, Peru and Venezuela the targets established exceed minimum requirements, which suggests that if they are attained, an improvement will take place in the housing situation and the cumulative deficits will be gradually reduced. But in Colombia and Ecuador the programme objectives fall short of minimum housing needs as estimated by ECLA, so that even if they are fulfilled, the housing situation will not have been stabilized.

The investment plans of Costa Rica, El Salvador,

Table 157. Latin America: Minimum annual requirements in respect of new housing units in 1960; building targets adopted in national programmes and housing investment plans; and number of housing units built per annum in about 1960–63

(*Units*)

Country	*Minimum annual requirements in respect of new housing units (estimate for 1960)*[a]			*Targets for housing programmes and investment plans*[b]				*Annual housing target in 1960–63 as a percentage of urban requirements*	*Number of urban housing units built per annum in about 1960–63*[c]	
	Total	*Urban*	*Rural*	*Period*	*Total*	*Urban*	*Rural*		*Period*	*Average*
Argentina	162,087	128,509	33,578	—	...	...	...	...	1960	55,000[d]
Bolivia	14,547	7,408	7,139	1962–66	25,647	10,194	15,453	137.6	—	...
Brazil	289,023	169,352	119,671	—	...	...	...	...	—	...
Chile	45,402	39,519	5,883	1961–70	53,870	44,450	9,420	112.5	1959–62	33,500[e]
Colombia	91,451	67,251	24,200	1961–65	...	45,220	...	67.2	1960–62	39,873
Costa Rica	11,520	6,661	4,859	1963	...	3,441	...	51.7	1950–61	3,100
Cuba	55,486	42,081	13,405	—	...	...	...	...	—	...
Dominican Republic	14,396	7,323	7,073	—	...	...	...	...	—	...
Ecuador	23,648	12,132	11,516	1964–68	9,370	7,644	1,726	63.0	—	...
El Salvador	11,050	9,106	1,944	1962–63	...	2,500	...	27.5	1958–62	984
Guatemala	15,982	12,137	3,845	1962–63	1,636	...	...	...	1960–62	902[f]
Haiti	15,336	6,316	9,020	—	...	...	...	...	—	...
Honduras	11,970	6,196	5,774	1962–64	...	2,208	...	35.6	—	...
Mexico	227,689	158,873	68,816	—	...	...	...	...	1958–60	6,564[g]
Nicaragua	6,639	3,977	2,662	1962–63	1,425	...	...	...	—	...
Panama	5,697	3,653	2,044	1962–66	10,000	...	...	...	1962–63	2,390[h]
Paraguay	5,001	3,069	1,932	—	...	...	...	...	—	...
Peru	60,711	33,693	27,018	1962–71	78,982	...	...	...	1962	5,429[i]
Uruguay	18,820	17,227	1,593	—	...	...	...	...	1955–62	21,000[j]
Venezuela	54,842	50,863	3,979	1963–66	65,000	...	...	45.9	1950–61	41,048[k]
Latin America	1,141,297	785,346	355,951	—	(245,930)	(115,657)	(26,599)	14.7		

[a] SOURCE: ECLA, ST/ECLA/CONF.9/L.10, 4 July 1962.

[b] SOURCES: ECLA, ST/ECLA/CONF.9/L.9; IA-ECOSOC, *Desarrollo Económico y Social de Costa Rica*. op. cit.; *Junta de Planeamiento y Coordinación Económica, Plan General de Desarrollo Económico y Social del Ecuador*, 1963; IVU, *Memoria a la Asamblea General, 1962–63*, Panama; IDB, *Social Progress Trust Fund. Second Annual Report, 1962*.

[c] SOURCES: Instituto de Investigación Económica de la CGE, *Programa Conjunto para el Desarrollo Agropecuario e Industrial*, Vol. IV, Argentina, 1962; Instituto de Crédito Territorial, *Informe, 1962*, Colombia, 1962; IA-ECOSOC, *Desarrollo Económico y Social de Costa Rica*, op. cit.; CORVI, *Plan Habitacional Chile*, 1963; Dirección General de Estadística y Censos, *El Salvador en Gráficas*, 1962; Banco de Guatemala, *Boletín Estadístico*, July–August, 1963; *Informe preliminar sobre los programas y estadísticas de vivienda en México*, presented at the Latin American Seminar on Housing Statistics and Programmes, Copenhagen, 1962; Junta Nacional de la Vivienda, *Informe de Situación sobre Vivienda, Construcción y Desarrollo Urbano*, Peru, 1963.

[d] Comprising housing units built by the private sector throughout the country.

[e] Comprising housing units built by the public sector (21,478) and the private sector (12,022) throughout the country.

[f] Private building in the capital of the Republic.

[g] Housing units built by the public sector throughout the country.

[h] Housing units built by IVU throughout the country. SOURCE: IVU, *Memoria a la Asamblea Nacional 1962–1963*, Panama.

[i] Housing units built in Lima.

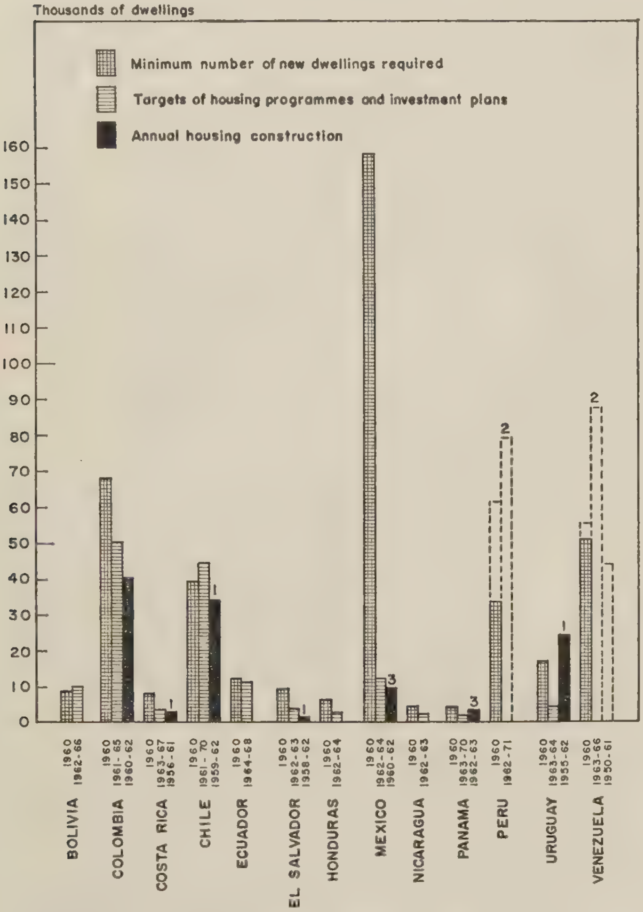
[j] Housing units built throughout the country. Provisional estimate based on national housing sample.

[k] Republic of Venezuela, *Informe Vivienda*, submitted to IA-ECOSOC, July 1963. Comprising housing units built throughout the country.

Honduras, Nicaragua, Panama and Uruguay attempt to satisfy, by building carried out with the direct intervention of the public sector, approximately 25 to 35 per cent of new housing requirements in the urban areas, whereas in Mexico the plan is much more limited, since it covers only 7.5 per cent of minimum housing needs.

Figure XXVII. Latin America: Minimum number of new dwellings required, targets of programmes and plans for housing investment and average annual construction figures, in urban areas, about 1960–63

Natural scale



In all cases the figures represent annual averages.

Notes:

[1] Covers all dwellings built: no separate data are available for urban construction.

[2] Total requirements and targets for both urban and rural areas.

[3] Relates to all dewllings built by the public sector.

It has been noted that, when the execution of large-scale housing projects is entrusted to various institutions, care has not always been taken to ensure co-ordination between the different projects, and this has in some instances created rivalry and antagonism between the national institutions involved. In addition, the desire to lose no time in carrying out projects financed by foreign aid has led to difficulties with regard to selecting sites in conformity with regional and urban development plans, the preparation of which is greatly behindhand in all countries. For this reason, problems have not infrequently arisen from lack of co-ordination between housing construction, on the one hand, and, on the other, the installation of communal water and sewage services, as well as the establishment of medical, educational and commercial facilities. It has also been observable that over-concentration of new dwellings in areas previously uninhabited or sparsely populated has given rise to serious problems in respect of community organization, the provision of local services and facilities, transport, etc.

It is hoped that the effective incorporation of the various housing projects into the national programmes and the creation of housing institutions to centralize and co-ordinate the preparation and execution of such programmes in each country will lead to the prevention or correction of the shortcomings the one mentioned and others such as lack of co-ordination, inappropriate choice of building sites, undue multiplication of bureaucratic formalities that increase building costs, inefficient selection of prospective occupants, and so forth.

3. Financing of housing

The period 1960–63 was marked by three significant developments as regards the financing of housing: (*a*) a decline in the importance of the traditional mortgage credit systems, based on the sale of certificates, bonds and securities on national capital markets, as sources of finance for housing; (*b*) the creation and expansion of savings and loan systems based on mutual benefit societies; and (*c*) the allocation of resources by the United States Government to assist the formation of national housing funds in the Latin American countries.

(a) *Domestic sources of financing*

As is pointed out elsewhere in the present study, the period 1960–63 witnessed in many countries an intensification of the inflation that has become chronic in Latin America. This trend particularly affected the mortgage banks, for it is common knowledge that inflation operates in favour of the mortgager, and discourages investment, especially the long-term investment at low rates of interest required for housing. Moreover, through the banking institutions Governments channelled funds towards the more dynamic sectors of the economy, and residential building had obviously nothing to gain by this process. It is thus understandable that in Latin America, as previously in Europe and the United States, new institutions would have had to be created for the purpose of tapping savings and granting loans for house purchase.

There are two different aspects of the financing of housing: financing of the building or production of dwellings, and financing of house purchase. For the former, short-term credits are needed, and their volume is closely related to the national capacity to save and to the increase in the gross product.

The financing of house purchase requires long-term credits, and depends on the capacity to pay of the households concerned as well as on the availability of funds for this purpose. In addition to the traditional mortgage systems, compulsory savings and loan systems have been instituted, by means of agreements establishing the right to obtain a loan within a fixed period of time, as in the cases of Mexico and Chile (CORVI); or voluntary savings and loan systems, similar to those operated by the savings and loan associations in the United States, where savers are not under any obligation to take out a loan, as well as savings and loan corporations based on shareholding. Several of these systems have been operating simultaneously in some countries.

During the period 1960–63, as previously stated, the Governments of the region paid great attention to the formation of national funds to be used for granting long-term house purchase credits. For this purpose, systems for the tapping of voluntary private savings were established, lesgislation was introduced covering institutional and compulsory savings, and provision was made for government contributions to the funds in question. Foreign loans were also used as an essential element in the inauguration of these national housing funds, i.e., as seed capital.

In the creation of national housing funds, there have been two stimulating factors and two principal obstacles. Of the former, the first that may be mentioned is the keen interest in acquiring a house of their own, indubitably evidenced by members of that population sector which has attained a certain cultural and economic level and their consequent readiness to make all kinds of sacrifices to gain this end. A second factor has been the conviction on the part of Governments that it is necessary to encourage habits of saving among the population at large.

The two great obstacles have been inflation and the low income levels of the bulk of the population. In order to offset the first of these factors, savings adjustment systems have been established; to obviate the second difficulty, attempts have been made to adapt the prices of the dwellings built to the capacity to pay of the households concerned. It is understandable—and experience has shown it to be the case in many countries—that when a rapid inflationary process exists any national housing fund will necessarily depreciate unless it is established on a basis of constant monetary values. This was done in Chile, where a system of savings and loans for housing was instituted by means of contributions adjustable in accordance with a procedure based essentially on fluctuations in the index of industrial salaries and wages,[33] within the limits set by the fluctuations of the consumer price index.[34] Similar adjustment systems have been incorporated into the legislation of other countries (Ecuador and Argentina), but have not yet been put into operation.

Although savings and loan systems have been able to channel considerable sums in savings into housing, and have given an effective stimulus to residential building, their initial effect was to attract savers from sectors of the population enjoying relatively high incomes, so that the prices of the new dwellings whose building or purchase was financed were also high. This was recognized in the various countries concerned, and efforts were made to re-direct loans towards the middle and lower income sectors. In addition, there was at first a relative lack of co-ordination between savings and loan systems and the architectural and engineering services of the housing institutions, and cases have been known of indifference or incompetence as regards promoting the reduction of building costs.

The effort to create national funds for the financing of house purchase by means of long-term loans has been only very recently initiated, and it is not possible to assess the results so far achieved. In some countries, however, insufficient care has been taken to ensure total recovery and reinvestment of capital, which involves a serious risk that the programmes may be suspended as a result of decapitalization.

Finally, it should be pointed out that financing systems for housing are designed to serve that sector of the population whose incomes are above certain minimum levels; that is, the sector whose members are in a position to service the debt incurred for the purchase of a housing unit meeting minimum requirements. To cater for the needs of the population groups below this level, various systems of direct and indirect subsidies and services to provide technical assistance in self-help projects have been established.

With regard to the efforts made to channel resources towards the construction of low-cost housing, the experience of the Latin American countries has varied widely. In all of them, the basic aim has been to set limits to the number of square metres per unit and to average building costs per square metre for dwellings built under national housing programmes. In the case of housing projects financed by loans from the Social Progress Trust Fund, average prices per unit range from 830 dollars in Brazil to 3,950 dollars in Argentina. These dwellings are intended for families with income levels varying between 30 and 215 dollars monthly. In view of the characteristics of city dwellings built up to the end of 1950, the limits thus imposed constitute manifest progress as regards the re-direction of resources towards low-cost housing. In relation to the average income levels prevailing in the capital cities, however, it would appear that the foregoing prices are still too high.

(b) *Foreign financial assistance for housing*

One fundamental change which has done much to encourage house building in Latin America has been the establishment of special funds for the external financing of housing programmes. It will be remembered that until 1960 the only external sources of finance for housing programmes were the International Bank for Reconstruction and Development (as regards promotion of the growth of the building materials industry) and the Development Loan Fund, established by the Government of the United States. In addition, in 1961 the United States Government set up the Social Progress Trust Fund, for the administration of which IDB was made responsible, and the Development Loan Fund was incorporated in the resources of AID, which also received fresh contributions for housing purposes. A capital sum of 250 million dollars was thus amassed for housing loans, and this gave a considerable stimulus to residential building.

More recently, the World Food Programme of the United Nations established a new source of external financing for housing, but the Latin American countries have not yet resorted to it, with the exception of Colombia, which has submitted an application to this institution for financial assistance for a housing project.

Among the effective and direct results of external financial aid have been the remarkable increase in the

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[33] *Elementos del Plan Habitacional de Chile con especial referencia al financiamiento mediante un sistema de ahorros y préstamos reajustables* (ST/ECLA/CONF. 9/L.18), 1962.

[34] Caja Central de Ahorros y Préstamos, *El sistema de ahorro y préstamo en Chile*, Santiago, Chile, 1963, chapter Two.

Table 158. Latin America: Housing loans by the Social Progress Trust F
and use made of these resou

Country and Agreement	*IDB housing loans*			*Time interva between date agreement an 31–XII–196 (years)*
	Date of signature of agreement	*Amount (thousands of dollars)*	*Housing units to be built*	
	(1)	*(2)*	*(3)*	*(4)*
Argentina				
Banco Hipotecario Nacional	24–I–1963	30,000	15,300	0.92
Bolivia				
Corporación Boliviana de Fomento	—	4,000	3,870	—
Brazil				
Banco do Nordeste do Brasil, S.A.	—	3,850	8,500	—
Chile				
Corporación de Fomento de la Producción and Corporación de la Reforma Agraria	2–V–1962	1,268	504	1.67
Caja Central de Ahorros y Préstamos	13–VI–1962	5,000	2,300	1.54
Sociedad Promotora de Viviendas Económicas Ltda. and Cía. C.P.A.	22–I–1963	2,000	1.900	0.92
Corporación de la Vivienda	—	2,000	2,400	—
Colombia				
Instituto de Crédito Territorial	2–II–1962	15,200	12,950	1.92
Costa Rica				
Instituto Nacional de Vivienda y Urbanismo de Costa Rica	31–X–1961	3,500	5,725	2.17
Cuba	—	—	—	—
Dominican Republic[c]				
Government of the Dominican Republic	28–II–1963	3,500	5,000	0.83
Ecuador				
Banco Ecuatoriano de la Vivienda	23–VII–1962	10,600	9,100[d]	1.42
El Salvador				
Instituto de Vivienda Urbana (IVU)	7–VI–1962	6,100	5,000	1.58
Guatemala				
Banco de Guatemala	1–X–1962	5,300	5,260	1.25
Haiti	—	—	—	—
Honduras				
Instituto de Vivienda	—	1,000	716	—
Mexico[e]				
Nacional Financiera, S.A.	—	10,000	23,000	—
Nicaragua[f]				
Instituto Nicaraguense de la Vivienda	2–VIII–1962	5,200	2,850	1.42
Panama				
Instituto de Vivienda y Urbanismo	22–VIII–1961	7,600	3,000	2.33
Paraguay	—	—	—	—
Peru[g]				
Republic of Peru	24–XI–1961	22,800	35,200	2.08
Asociación Mutual de Crédito para la Vivienda "El Pueblo"	1–V–1962	1,000	400	1.67
Uruguay				
Republic of Uruguay	21–V–1963	8,000	4,100	0.58
Venezuela				
Banco obrero	15–XI–1961	12,000	35,500	2.13
Banco obrero	8–VI–1962	10,000	5,710	1.58
TOTAL	—	169,918	188,285	1.53

SOURCE: Inter-American Development Bank, *Social Progress Trust Fund. Third Annual Report 1963.*

[a] Column (7) $= \frac{\text{Column (5)} \times (2) \times 100}{\text{Column (4)} \times \text{Column (2)}}$;

[b] Column (12) $= \frac{\text{Column (8)} \times (2) \times 100}{\text{Column (4)} \times \text{Column (3)}}$; Column (13) $= \frac{\text{Column (9)} \times (2) \times 100}{\text{Column (4)} \times \text{Column (3)}}$; Column (14) $= \frac{\text{Column (8)}}{\text{Column (4)}}$; Column (15) $= \frac{\text{Column}}{\text{Column}}$

number of dwellings built in Chile, Colombia, and Costa Rica, and the establishment of private savings and loans systems for housing by means of the formation of savings and loan associations or mutual benefit societies in Chile, the Dominican Republic, Ecuador, Peru, and Venezuela. AID loans were largely used, during the period under discussion, to support the creation of national savings and loan systems constituted by mutual benefit societies, under the supervision and with the backing of a housing fund or bank in each country.

IDB loans in the years 1961 and 1962 were channelled mainly towards the financing of large-scale low-cost housing projects for households in the middle income groups. It is estimated that the funds deriving from loan agreements with IDB will permit the building of some 190,000 dwellings in the region as a whole in the space

American Development Bank) approved in 1961, 1962 and 1963,
31 December 1963

gs against loans up to December 1963		*Index of expenditure efficiency*[a]	*Housing units programmed*				*Indexes of attainment of physical targets*[b]			
nt nds rs)	*Percentage*		*Total*	*Completed*	*Under construction*	*Projected*	*Programming*	*Execution*	*Annual volume (number of housing units)* *Programmed*	*Built*
	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
0.0	8.7	18.8	…	…	…	…	…	…	…	…
	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
0.0	11.8	14.2	738	57	59	622	175.4	13.5	442	34
9.9	65.0	84.4	3,202	451	1,677	1,074	180.8	25.5	2,079	293
2.5	24.6	53.5	1,188	50	602	536	135.9	5.7	1,291	54
	—	—	—	—	—	—	—	—	—	—
1.0	58.8	61.3	13,000	8,998	3,186	816	104.6	72.4	6,771	4,686
9.7	100.0	92.2	4,258	4,128	130	—	68.5	66.5	1,962	1,902
	—	—	—	—	—	—	—	—	—	—
2.4	1.2	2.9	238	0.0	238	—	11.5	—	287	—
6.7	9.6	13.5	611	8	168	435	9.5	0.1	430	6
3.8	48.8	61.7	2,028	1,712	260	56	51.3	43.3	1,284	1,084
1.4	0.0	0.0	482	0.0	182	300	14.7	—	386	—
	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
3.2	58.9	83.0	2,335	1,052	657	626	114.0	51.5	1.644	741
7.2	79.4	68.2	2,681	1,645	825	211	76.7	47.1	1,151	706
	—	—	—	—	—	—	—	—	—	—
6.5	38.9	37.4	20,090	6,394	7,929	5,767	54.9	17.5	9,659	3,074
6.3	73.6	88.2	452	318	134	—	135.3	95.2	271	190
0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—	—
5.9	54.0	50.8	15,170	12,070	3,100	—	40.1	31.9	7,122	5,667
00.0	10.0	12.7	5,701	676	1,610	3,415	126.4	15.0	3,608	428
6.5	28.9	—	72,174	37,559	20,757	13,858	—	—	—	—

There is also a loan of 3 million dollars, approved on 23 August 1962, for the purpose, *inter alia*, of building 350 housing units for the agricultural sector.

Comprising 7,600 housing units built, and 1,500 repaired or completed.

There is also a loan of 5 million dollars, approved on 20 June 1963, for the purpose, *inter alia*, of building 4,300 housing units for the agricultural sector.

There is also a loan of 2,500,000 dollars, approved on 14 June 1962, for the purpose, *inter alia*, of building 410 housing units for the agricultural sector.

There is also a loan of 1 million dollars, approved on 19 October 1961, for the purpose, *inter alia*, of building 600 housing units.

of approximately two or three years (see table 158). If this figure is compared with minimum annual requirements in respect of new housing in Latin America, which are in the neighbourhood of 1,140,000 units (785,000 in urban areas and 355,000 in rural areas), the number of dwellings financed by external aid appears small in relation to the needs of the region, but if it is borne in mind that the object of these loans was to initiate the creation of a fund to finance housing in each country, the amounts they represented appear considerable. Indeed, in some cases they were higher than was warranted by the ability of the institutions concerned to utilize the funds within the period allotted, as is shown by the data on the status of the programmes (see again table 158).

It is estimated that the housing loans granted by IDB in 1961–63, which totalled approximately 170 million dollars, will provide for the building of some 190,000 dwellings. But the utilization of these resources has been slow; up to 31 December 1963, drawings against such loans had amounted to about 49 million dollars, i.e., 28.9 per cent over an average period of 1.5 years. The statistical indicators given in columns 7, 12 and 13 of table 158 show the percentage utilization of external resources, in the space of two years, on the basis of the operations registered up to 31 December 1963. There are considerable variations from one country to another, and even within the same country, as regards the agreements concluded. The utilization of these resources in the two-year period (column 7) is estimated at less than 20 per cent in the case of agreements with Argentina, Chile (CORA and CORFO), the Dominican Republic, Ecuador, Guatemala, Uruguay and Venezuela (Banco Obrero, 8 June 1963). At the other extreme, utilization is expected to exceed 80 per cent; this applies to agreements with Chile (Caja Central de Ahorros y Préstamos), Costa Rica, Nicaragua and Peru (Asociación Mutual de Crédito para la Vivienda "El Pueblo").

The progress made towards attainment of the targets established in the agreements (columns 12 and 14) also varies greatly. While programming has undeniably been adequate in most cases, it is equally true that the implementation of the programmes, measured by the number of dwellings completed, has been unexpectedly slow.

On the basis of the statistics to hand, it may be concluded that the external resources available for housing are not being put to sufficiently intensive use, and that in consequence there is an immediate possibility of expediting the execution of investment plans for housing, by the application of resources already at the region's disposal.

4. CONCLUSIONS

During the period 1960–63 an effective stimulus was given to house-building in fifteen Latin American countries by means of programmes and investment plans for the execution of which external assistance was available. The Social Progress Trust Fund (through the Inter-American Development Bank) granted loans totalling 170 million dollars, which will help to build some 190,000 dwellings. In addition, AID granted loans and made donations amounting to about 102 million dollars. Although the initial impact of these programmes is already evident in the countries concerned, it is still too early to appreciate their real effect. Since in the Latin American countries the time that elapses between the allocation of funds for building and the completion of the projects in question is almost certain to be more than a year, and the majority of the foreign loans were granted in 1962, by 31 December 1963 it was not yet possible to evaluate the development of these programmes, some of which had hardly been initiated. However, the situation with regard to housing programmes and plans in the region, as at 31 December 1963, may be summarized as follows:

(*a*) Only six countries in the region had formulated national housing programmes as part of their national economic development plans. Of these, only two programmes were fully under way, and none had been able to satisfy the minimum building requirements entailed in providing dwellings for the new households formed each year and gradually replacing existing housing units. However, in the two countries in question, the volume of residential building had more than doubled in relation to the period preceding the initiation of the programmes;

(*b*) In eleven other countries, short-term investment projects had been prepared, and had reached varying stages of development. The targets envisaged in these projects signify the construction of a certain number of urban dwellings, approximately equivalent to between 25 and 35 per cent of minimum housing needs, except in the case of Mexico, where the programme aims at satisfying only 7.5 per cent of national housing requirements;

(*c*) In the early stages of the execution of the investment plans, certain shortcomings have been noted which it is important to correct: undue slowness in the preparation and execution of projects; building costs exceeding those appropriate to the middle income sectors of the population, and even higher than those originally contemplated; lack of co-ordination with the parallel development of community services; time-lags in physical and regional planning in relation to the execution of housing projects, frequently resulting in the arbitrary selection of building sites without due regard to the economic and social integration of the future occupants and the development of community services; and uncertainty as to the continuity of housing plans;

(*d*) Most countries have been very slow to take advantage of foreign aid. It clearly should be possible to intensify the construction of dwellings in the near future, through more efficient utilization of the resources deriving from external financial assistance that are already available for use.

D. RURAL HOUSING PROGRAMME, 1960–63[35]

Living conditions in respect of housing are even worse in the rural environment than in urban areas, although they vary considerably among the different countries and even from one part of the same country to another. The following are among the chief shortcomings: housing units are very small, the great majority consisting of one or two rooms; as families are large, the degree of overcrowding is high, with three or more persons to a room; the houses are ill-lit, ill-ventilated and unheated, and the materials of which they are built are mainly of a rustic character. A high percentage have earthen floors, daub and wattle walls and thatched roofs. The water supply and sanitary arrangements are generally unsatisfactory. As more than 50 per cent of the population of Latin America lives in rural areas, it is there that the most formidable housing problem is to be found, but its urgency is not fully appreciated because the rural population is widely scattered, its growth is slow and it is prepared to put up with the traditional state of affairs.

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[35] This part of the survey is based on data obtained from widely differing sources; it is far from complete, and can only be regarded as a provisional evaluation. The lack of statistical data has precluded a proper assessment of the numerical significance of some qualitative aspects of rural housing.

For the purposes of population and housing censuses, the rural population is taken in Latin America to be that living in centres with fewer than 2,500, 2,000, 1,500 or 1,000 inhabitants, depending on the country concerned (see table 159). According to ECLA estimates, in which the population domiciled in places with fewer than 2,000 inhabitants is regarded as rural, 60.7 per cent of the population lived in rural areas in 1950 (see table 160). This percentage had been reduced by 1960 to 53.8, as a result of in-migration, a demographic phenomenon which has been analysed in a number of publications.[36]

Table 159. Selected Latin American countries: Total population and percentages of urban and rural population, according to provisional findings of censuses taken in about 1960

Country	*Date of census*	*Population (thousands)*			*Percentage of total population*	
		Total	*Urban*	*Rural*	*Urban*	*Rural*
Brazil[a]	1–IX–1960	70,967	31,991	38,976	45.1	54.9
Chile[b]	29–XI–1960	7,375	4,903	2,473	66.5	33.5
Costa Rica[c]	1–IV–1963	1,325	457	869	34.5	65.5
Dominican Republic[d] . .	7–VIII–1960	3,014	918	2,096	30.5	69.5
El Salvador[e]	1–V–1961	2,511	980	1,531	39.0	61.0
Mexico[f]	8–VI–1960	34,923	17,705	17,218	50.7	49.3
Panama[g]	1–XII–1960	1,076	446	629	41.5	58.5
Paraguay[h]	14–X–1962	1,817	643	1,174	35.4	64.6
Peru[i]	2–VII–1961	10,365	4,878	5,487	47.1	52.9
Venezuela[j]	26–II–1961	7,524	4,705	2,819	62.5	37.5

SOURCE: *Statistical Bulletin for Latin America*, vol. I, No. 1, table 5.

[a] The population given as *urban* in the provisional data published corresponds to that enumerated in the urban and suburban sectors of *cidades* (administrative centres of *municipios*) and *vilas* (administrative centres of other districts within the *municipio*), whatever their size. The remainder, enumerated outside *cidades* and *vilas*, constitutes the *rural* population. (Brazil, *Sinopse Preliminar do Censo Demográfico*, 1960).

[b] The *urban population* is constituted by the inhabitants of: (i) population centres of some demographic and administrative importance, generally *cabeceras* (administrative centres) of communes; (ii) population centres which, without ranking as towns or cities, are provided with sufficient public or municipal services to give them, in functional terms, urban characteristics; (iii) so-called rural areas which are not agricultural (industrial and mining settlements provided with the aforesaid public services). The remainder constitutes the *rural population*. This is the same definition as was adopted for the 1952 census. (Chile, *XII Censo General de Población y I de Vivienda, Abril de 1952, Resumen del País*, vol. I, page 67.)

[c] In Costa Rica's 1950 census the urban population was taken to be that of *cabeceras* of cantons.

[d] The *urban* population was considered to comprise the inhabitants of *cabeceras* of *municipios* and municipal districts. The remainder were classified as *rural* population. (Dominican Republic, *Censo Nacional de Población*, 1960, *Follete 4°*, page 2.)

[e] The term *urban* was applied to areas within the boundaries of *cabeceras* of *municipios* (smallest political division), regardless of any other special characteristic. All other areas were considered to be *rural*, except for the *municipio* of San Salvador, which was classified as urban. (El Salvador, *Tercer Censo Nacional de Población, 1961. Población por área y sexo, departamentos, municipios y cantones*, page vi.)

[f] *Urban population*: that living in places with over 2,500 inhabitants. *Rural population*: that living in places with 2,500 inhabitants and under. (Mexico, *VIII Censo General de Población, 1960. Resumen general*, page xlv.)

[g] The *urban population* is taken to be that of places with 1,500 inhabitants and over, in the whole or part of which the following characteristics are found: electric light, piped water and sewage systems, and paved streets and sidewalks, as well as secondary education facilities, shops, and social and recreational centres. The remainder of the population, enumerated in places or areas where these services do not exist, is considered to be *rural*. (Panama, *Censos Nacionales de 1960. Vol. IV: Características Generales.*)

[h] In Paraguay's 1950 census the population classified as urban was that enumerated within the official boundaries of *municipios*.

[i] Any population centre which is a District capital, whatever the number of its inhabitants, and regardless of whether it is a city, a *villa* or a *pueblo*, is classified as an *urban area*. As an exception to this general rule, the term urban area is also applied to a population centre which, although not a District capital, has similar characteristics (streets, squares, water, drainage and lighting services, and a number of inhabitants equal to or exceeding that of the District capital). The rest of the country constitutes the *rural area*. (Peru, *Sexto Censo Nacional de Población*, July 1961, annex IX, page 305.)

[j] Published census data are based on the following three categories: 1. *Rural population*: that living in population centres with fewer than 1,000 inhabitants; 2. Intermediate population: that living in population centres with 1,000–2,499 inhabitants; 3. *Urban population*: that living in population centres with 2,500 inhabitants and over. In 1950 the population living in centres with 1,000 inhabitants and over was regarded as urban. (Venezuela, *IX Censo Nacional de Población: Resultados preliminares por centros poblados, número y tamaño.*)

The term "rural population" covers a wide range of sectors. They are differentiated as follows: (*a*) villages (*aldeas*) of 1,000 to 2,500 inhabitants; (*b*) large and small hamlets (*villorrios* and *caseríos*) with fewer than 1,000; and (*c*) dispersed settlements. In an ECLA study,[37] the rural population is classified by the size of the settlement, its physical features, the economic and social characteristics of the inhabitants and the land tenure system, and a historical account is given of the origin of the various rural settlement patterns. This classification affords an analytical basis for the description and interpretation of the housing problem in the rural milieu.

This problem displays different characteristics in each of the rural substrata. For example, in the villages, *villorrios* and *caseríos* its physical aspects are similar to those of the housing problem in the urban environment; but the difficulties are intensified by the lower income levels and the small size of the market. Mining townships and centres, like the *caseríos* and *villorrios* that have sprung up as an offshoot of major public works, are characterized by the fact that the enterprises concerned are responsible for housing their workers and employees. Similarly, agricultural enterprises are supposed to provide adequate housing for plantation, *hacienda* and *estancia* workers and their families.

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[36] Juan C. Elizaga, *Tasas de migración rural-urbana por edad*, Latin American Demographic Centre (CELADE), Santiago, Chile, 1963.

[37] *Rural settlement patterns and social change in Latin America: notes for a strategy of rural development*, reference document No. 1, prepared by the Social Affairs Division of ECLA for the Latin American Regional Seminar on the Role of Community Development in the Acceleration of Economic and Social Development, Santiago, Chile, 1964.

Table 160. Latin America: Total urban and rural population, by countries, 1950 and 1960[a]
(*Thousands of inhabitants*)

Country	*1950*	*1960*	*Country*	*1950*	*1960*
Argentina	17,189	20,956	*Haiti*	3,380	4,140
Urban	11,038	14,161	Urban	340	513
Rural	6,151	6,795	Rural	3,040	3,627
Urban population as a percentage of total	64.2	67.6	Urban population as a percentage of total	10.1	12.4
Bolivia	3,013	3,696	*Honduras*	1,428	1,950
Urban	778	1,104	Urban	247	335
Rural	2,235	2,592	Rural	1,181	1,615
Urban population as a percentage of total	25.8	29.9	Urban population as a percentage of total	17.3	17.2
Brazil	52,178	70,309	*Mexico*	26,366	36,018
Urban	16,083	26,936	Urban	12,144	19,741
Rural	36,095	43,373	Rural	14,222	16,277
Urban population as a percentage of total	30.8	38.3	Urban population as a percentage of total	46.1	54.8
Chile	6,073	7,627	*Nicaragua*	1,060	1,477
Urban	3,689	4,987	Urban	297	463
Rural	2,384	2,640	Rural	763	1,014
Urban population as a percentage of total	60.7	65.4	Urban population as a percentage of total	28.0	31.3
Colombia	11,679	15,468	*Panama*	797	1,055
Urban	4,253	7,134	Urban	282	447
Rural	7,426	8,334	Rural	515	608
Urban population as a percentage of total	36.4	46.1	Urban population as a percentage of total	35.4	42.4
Costa Rica	801	1,206	*Paraguay*	1,397	1,768
Urban	232	456	Urban	392	506
Rural	569	750	Rural	1,005	1,262
Urban population as a percentage of total	29.0	37.8	Urban population as a percentage of total	28.1	28.6
Cuba	5,508	6,797	*Peru*	7,995	10,098
Urban	2,713	3,709	Urban	2,240	3,618
Rural	2,795	3,088	Rural	5,755	6,480
Urban population as a percentage of total	49.3	54.6	Urban population as a percentage of total	28.0	35.8
Dominican Republic	2,243	3,030	*Uruguay*	2,195	2,491
Urban	482	834	Urban	1,726	2,038
Rural	1,761	2,196	Rural	469	453
Urban population as a percentage of total	21.5	27.5	Urban population as a percentage of total	78.6	81.8
Ecuador	3,197	4,317	*Venezuela*	4,974	7,331
Urban	878	1,423	Urban	2,422	4,611
Rural	2,319	2,894	Rural	2,552	2,720
Urban population as a percentage of total	27.5	33.0	Urban population as a percentage of total	48.7	62.9
El Salvador	1,868	2,442	*Latin America*	156,146	205,941
Urban	515	716	Urban	61,425	94,899
Rural	1,353	1,726	Rural	94,721	111,042
Urban population as a percentage of total	27.6	29.3	Urban population as a percentage of total	39.3	46.1
Guatemala	2,805	3,765			
Urban	674	1,167			
Rural	2,131	2,598			
Urban population as a percentage of total	24.0	31.0			

SOURCE: Urban population: That of places with 2,000 inhabitants and over.

[a] Urban population: that living in places with 2,000 inhabitants and over.

The population living in dispersed settlements of fewer than twenty persons, or about four families, accounts for sizable proportions of the rural population in general. According to the most recent census data, the percentages represented by this dispersed rural population were 28.8 in Argentina in 1947; 55.0 in Brazil in 1960; 46.8 in Chile in 1952; 66.5 in Costa Rica in 1950; 46.4 in Cuba in 1953; 76.2 in the Dominican Republic in 1950; and 87.8 in Haiti in 1950. The bulk of the dispersed population unquestionably consists of the households of agricultural workers, who may be smallholders, *inquilinos*, leaseholders or sharecroppers on the big *haciendas* and *estancias*, or squatters on state land. The following description refers to a settlement of smallholders (*minifundistas*) on the Andean plateau in Venezuela, but it would be equally applicable to many other places from Central America to Chile. "Despite the Spanish tradition of encouraging the establishment of very compact settlements, the tendency of rural households in the high Andes to scatter their homes over the mountainsides has persisted since pre-Colombian days. The tiny thatched houses, sometimes barely distinguishable from the ground, are apparently dotted about completely at random. But only apparently. The ecological factors determining their location are often manifold. Thus, it is more than likely that they will be found on the sunniest slopes. Where at first glance their arrangement seems to follow no rational plan, a more careful examination reveals that they are fairly systematically situated along a stream which provides the water essential for everyday life." The findings of a questionnaire answered in 1952 by 57 per cent of the mayors of *municipios* in Guatemala confirm the predominance of *caseríos* and dispersed settlements, although at the same time they indicate the heterogeneity of the groups that may be found in areas where settlement took place long ago. The mayors identified 2,501 population centres apart from the *cabeceras* (administrative centres) of their *municipios*. Of these, 173 were compact settlements arranged along regular streets, 333 were compact but had no streets, 1,407 consisted of houses which although dispersed were within sight of one another, and 588 were isolated dwellings with no neighbours in sight.

The dispersed rural population also includes the indigenous communities which are of particular numerical significance in Bolivia, Ecuador, Guatemala, Mexico and Peru. The housing problem in these communities presents peculiar characteristics deriving from cultural factors, and special attention has been devoted to it in the Andean Indian Programme. The following description of one such community in Ecuador is illustrative of the situation in this milieu.

> "The *hacienda* known as San Agustín de Callo lies embedded between the spurs of the snow-peak of Cotopaxi, in the province of the same name. Within the *hacienda*, near the Cerro de Colcas, there is a long stretch of flat ground, scattered over which are the homes of a number of *huasipunguero* families, at a height of approximately 3,000 metres above sea level. The population of this *hacienda*, belonging to a homogeneous Indian type no doubt descended from the aboriginal Panzaleo and Llactacunga tribes, totals 561 persons, of whom 416 belong to 86 *huasipunguero* families, and 145 (90 of whom are adults and 55 under age) come from outside the community (*arrimados*). The children of the *huasipungueros* number 249 in all, which gives an average of 2.9 children per family. . . . Of the 145 *arrimados*, 42 adults and 55 children are grouped in 15 families, and the remaining 58 are regarded as members of *huasipunguero* households. . . . The basis of this rural community's economy derives from several sources: the *huasipungo* first and foremost, on which its holders grow their own subsistence crops; the wages that each *huasipunguero* receives for his work on the *hacienda*; the earnings of other members of the household as 'free' labourers; and small-scale marketing of agricultural produce; while there is also a little group of Indians who add to their income by means of a rudimentary textile industry. . . . The production of each *huasipungo* is used almost entirely for home consumption, and there are very few instances in which surpluses are available for marketing in the neighbouring township of Saquisilí, where certain foods are also bought when the harvest has been poor. . . . The *huasipungueros* hold a hectare or a hectare and a half of land, tenure of which is hereditary. On this plot, known as a *huasipungo*, is built the family home, which usually consists of a couple of huts, with an annex in the shape of a shed that serves as a storehouse. These rudimentary buildings for human use are supplemented by the sheepfold, the poultry-run and, sometimes, by a pigsty and a cowshed, not far away from the huts themselves. The living quarters consist of a single room, although in a few instances bedrooms are divided off by board or reed partitions. The hearth is in a corner of the hut, and consists of three or four stones or clay bricks on which stand the pots and pans, and between which the fuel is placed (usually brushwood, *paja brava*—a grass similar to esparto—or dried dung). The huts are unfurnished; in exceptional instances they may be found to contain a table or so. Cooking utensils are of earthenware; a few of aluminium are now to be seen. There is no potable water supply; what is needed for cooking and other purposes is drawn from a small watercourse which runs through the *hacienda*, and which dries up in summer. Similarly, electric light is lacking; primitive methods of lighting are used. No latrines exist; human waste is eliminated and rubbish dumped on the ground in the immediate vicinity of the huts, which, besides being ill-lit and ill-ventilated, are also unhygienic in that they provide shelter for domestic animals. The building materials used in these housing units are wood and earth. Chahuarquero wood is generally preferred for the roof, and eucalyptus for struts, cross-beams and thresholds. The floor is invariably of trodden earth. The building is in the shape of a truncated pyramid, which is carried to a height of 4 to 5 metres so that the slope of the roof may be steep. . . . Among the agricultural workers of San Agustín de Callo illiteracy is rife, for want of a school. . . . The highest infant mortality index is represented by diseases of bronchial and intestinal origin; such diseases also have a high incidence on the adult population, but with a lower mortality index. . . . Among young people and adults, the commonest form of entertainment—if it may be so called—is getting drunk, at week-ends and on feast-days, and this is encouraged by the free sale of *aguardiente* and *chicha* in the district. . . . However, the people are beginning to take an interest in sport, their preferences inclining to volley-ball and football."[38]

Obviously, as a general rule, rural housing in the region leaves much to be desired, if it is judged by the standards established for urban housing. Although the impression that rural housing units are built of rustic materials (mud, straw, cane, stones, etc.) has often been exaggerated, it is true that a high proportion of the materials actually used is unsuitable. Thus, for example, table 161 shows that in 1950, 70 per cent or more of rural housing units in Honduras, Panama, Paraguay and Venezuela had earthen floors. Rural housing units are smaller on an average than those in urban areas, and consequently overcrowding, measured by the number of persons to a room, is even more serious than in the towns. In 1960, Cuba, Uruguay and Venezuela were the only countries in which the proportion of housing units supplied with piped water exceeded 10 per cent; and sanitary facilities were also very scanty.[39]

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[38] Andean Indian Programme, *De peón a propietario: programa experimental de reestructuración de huasipungos*, San Agustín de Callo, Ecuador, 1963

Table 161. Percentage of housing units with various characteristics in six Latin American countries about 1950

Country	*Urban housing units as a percentage of total*	*Percentage of housing units with:*		
		Earthen floors	*Thatched roofs*	*Adobe walls*
Argentina .	64	23.8	18.1	19.8
Venezuela .	49			
Urban .		26.4	14.7	—
Rural .		83.3	67.0	84.6
Panama .	42			
Urban .		4.8		
Rural .		69.6		
Colombia .	38	52.7	46.2	72.3
Paraguay .	28	73.6	74.3	—
Honduras .	17			
Urban .		52.7	6.3	64.6
Rural .		89.8	33.8	58.4

SOURCE: *Algunos aspectos salientes del desarrollo social de América Latina*, chapter II, *Vivienda*, provisional text prepared for the General Secretariat of OAS for the *Economic and Social Survey of Latin America, 1961*.

The situation in Peru is illustrative, although not representative, of that existing in all the Latin American countries. According to the 1961 census, 39 per cent of rural housing units in that country consisted of a single room, and 29 per cent of two; 44 per cent of the total number of housing units showed a rate of occupancy of three or more persons per room; the lack of windows and lighting are common features in a large sector of the country; and about 70 per cent of the population of Peru lives in cane or mud huts.[40] As far as urbanization is concerned, it is easy to see that the greater the distance between housing units, the more difficult it will be to endow them with urban services at reasonable costs, and this applies particularly to the homes of agricultural workers, especially when they are situated on very extensive estates, where they must necessarily be widely scattered for the purposes of guarding and tending the remoter parts of the property. So long as latifundia exist, it will be virtually impossible to provide the dispersed housing units of the agricultural workers with urbanization services, however primary in character. The situation is more favourable when the estates are smaller and the housing units are therefore closer together, or when the workers on large agricultural properties are domiciled in compact settlements. The same is true as regards providing rural areas with such community services as schools, polyclinics, etc., the installation of which would only be justifiable where there was a sufficient concentration of housing units to permit of financing them.

The rural housing problem has several common factors. In the first place, house-building is a traditional activity which is very difficult to improve upon owing to a series of circumstances such as the dispersed settlements; low income levels; shortage of suitable materials; lack of skilled workers; and the low priority which for cultural reasons is assigned by the inhabitants themselves to the need for better homes. Secondly, it is obvious that the occupants of rural housing units will not feel inclined to take any trouble to improve premises of which they are not the owners. The predominance of traditional living patterns, moreover, means that very special solutions are required.

There are great dissimilarities between the rural population in the sierras and in the tropical areas, but, in any event, apart from these radical differences due to climate, the causes of the housing problem are inextricably knit up with the economic conditions, the social structure, the customs and the traditions of the population sectors concerned. The solution of the rural housing problem cannot hinge, as does that of urban housing, upon the construction of a specific number of housing units. Rural housing must be envisaged as an inseparable component of rural development considered in all its aspects, among which housing may be a subsidiary element.

It is therefore understandable that, despite the significance and gravity of the rural housing problem, efficacious means of tackling it on a nation-wide scale should not have been discovered as they have for uban housing. Nevertheless, direct and indirect measures for the benefit of rural housing have been adopted in various countries, and include the following: (*a*) study of housing conditions in the rural environment; (*b*) establishment of self-help building programmes and credits for small farmers; (*c*) adoption of legal measures requiring entrepreneurs to provide proper housing for the families of the agricultural workers they need in order to farm their estates; (*d*) introduction of tax measures designed to encourage the construction of rural housing. A description follows of some of the measures adopted in Latin American countries with a view to the improvement of housing conditions in rural areas.

Legislative Decree No. 2, which established the Plan Habitacional de Chile in 1959, made CORVI responsible for "planning and building clusters of low-cost housing units in agricultural areas, for sale to agricultural employees or workers, or to the owners of neighbouring agricultural properties who intend to use them as accommodation for their employees, *inquilinos* or labourers". To finance these operations, a 5-per-cent tax is levied on profits in the agricultural sector, for the benefit of CORVI. Furthermore, agricultural landowners are under the obligation to declare the number of housing units for workers and *inquilinos* existing on their estates and the number of new units they need to build for the accommodation of the said workers. The funds accruing from the tax referred to can also be drawn upon for loans to agricultural landowners for the purpose of building new rural housing units or enlarging or repairing those already in existence. With the aim of encouraging the participation of the private sector, provision was made in the legislative decree cited (No. 2—Plan Habitacional) for the possibility of securing tax exemption by means of investment in "savings quotas for housing" or by depositing in a savings and loan association an amount equivalent to the tax liability plus an additional 40 per cent. The value of low-cost housing built by agricultural landowners for their *inquilinos* could also be credited against tax liabilities. The responsibility for such activities and the corresponding resources were subsequently transferred to the Instituto de la Vivienda Rural. During the past three years this Institute has been concerned in the building of 891 housing units. In the last two years (1962 and 1963) the Corporación de la Reforma Agraria built 476 housing units. It was also established that the Corporación de la Vivienda, the Corporación de la Reforma Agraria and the Instituto de la Vivienda Rural should be empowered to organize "agricultural *villorrios*", first making sure of the existence of suitable sources of work for the inhabitants of the hamlet and the availability of indispensable community services. A Subcomisión de Vivienda Rural has lately been formed, the function of which is to give advisory assistance in the implementation of those aspects of the ten-year plan (Plan Decenal) which have a bearing on rural housing.

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[39] For detailed statistical data, see ECLA, *Statistical evaluation of housing conditions, existing deficits and future housing requirements in the Latin American countries* (ST/ECLA/CONF.9/L. 10).

[40] Pan American Union, *Housing in Peru*, Washington, D.C., 1963, page 658.

In Ecuador, the Andean Indian Programme, in co-operation with the Caja de Reconstrucción and the Instituto Nacional de la Vivienda, carried out studies on the social environment in indigenous communities and sponsored projects whereby many communities were benefited. In 1963, IDB granted a rural development loan which would enable these activities to be extended to about 100 communities. As part of the Programme, the gradual improvement of indigenous housing units was promoted, as well as the construction of a standard housing unit representing a considerable advance on the traditional patterns.[41] The experience of the Programme in this respect was carefully evaluated so that amendments could be introduced into the plans. The housing programme in process of implementation covers such aspects of the problem as agricultural extension services, community organization, roads, schools, health, etc. Private enterprise is also developing several projects in Ecuador.

In Uruguay, the Ley del Estatuto del Trabajador Rural, with its regulatory decrees, assigns to the Executive the function of determining "minimum requisites" for agricultural workers' dwellings, and lays it down that in no case can these be wholly or partly used "for storage of any kind". Act No. 2100, of 27 April 1954, in its turn, deals with the leasing of rural properties, and stipulates that every owner of a rented property must endow it with "quarters for peons", and that the nature or scale of the additions and improvements must "be in reasonable keeping with the real value of the estate" and "with the circumstances in each case"; furthermore, under the terms of Act No. 12394 of 2 July 1957 (Plan Agropecuario), in the granting of loans, priority must be given to the rural establishments which comply with the injunctions referred to in this chapter. Lastly, it should be recalled that under the regulations of the 1945 Act, houses should be "hygienic and spacious", and that in no case should the cubic dimensions of their living accommodation be less than 17 metres per person; that partitioning appropriate to the age and sex of the occupants should exist: that a suitable place for meals should be provided; and so forth. For these necessary improvements the owner of the establishment is responsible even when it is leased out. Every rural establishment should employ, if possible, at least as many heads of families or persons with dependent relatives as would be consistent with a specific scale that "is graduated in accordance with the assessed value of the establishments". The persons taken into account for these purposes, "provided they work in the establishment and are habitually domiciled there", will be the producer, those of his offspring that have dependent relatives and/or bachelors of over 18 years of age.

In 1948 Venezuela embarked upon a rural housing programme (Programa de Vivienda Rural) instituted by the División de Malariología del Ministerio de Sanidad y Asistencia Social.[42] The programme was founded in connexion with the anti-malaria campaign, and when the latter came to an end advantage was taken of the field organization which had been established for its purposes. The method used in the study and preparation of the national rural housing plan (Plan Nacional de Vivienda Rural) was based on the consideration that rural areas differ radically from urban areas in their living conditions, habits and culture. It is asserted that:

> "the Venezuelan agricultural labourer who constitutes the nucleus of the rural population earns on an average one fourth as much as an unskilled worker. The cost of housing units for the lower income groups in Venezuela is not less than 10,000 bolivares. In proportion to his income, the agricultural worker ought not to spend more than 2,500 bolivares. How can the cost of housing be reduced to one fourth of the present figure, with due regard to the fact that the requisites for a rural housing unit are no less in respect of living space and structural solidity?
>
> "By means of proper planning, an attempt was made to reduce waste of space and building costs to a minimum by the use of autochthonous materials, including the most autochthonous of all—earth. In the light of these principles a standard housing unit was designed, of which the average cost was 5,000 bolivares, and still above the price that many agricultural workers could afford. Since 2,500 bolivares could be taken to represent labour costs, the idea was mooted that they might be saved in part or altogether by inviting the collaboration of the agricultural household itself, traditionally accustomed as it was to building its own dwelling.
>
> "The use of earth or sand as a basic material in the rural housing unit and the introduction of self-help and mutual aid practices are the most original aspects of the Programa de Vivienda Rural, whereby it is differentiated from similar programmes; they meet with a very favourable reception among the rural population in Venezuela because they are profoundly in accord with its psychology. The population in question—like its counterparts all the world over—clings to its traditions, and would have been unwilling

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[41] Andean Indian Programme, *La Vivienda Campesina*, Quito, Ecuador, 1961, page 19 and plates.

[42] Dirección de Malariología y Saneamiento Ambiental del Ministerio de Sanidad y Asistencia Social, *Aspectos del Programa Nacional de Vivienda Rural*, División de Vivienda Rural, Caracas, Venezuela, 1961.

to accept a building system that ran counter to its own propensities. Furthermore, the introduction of unpopular systems would have been incompatible with the other basic point, namely, the idea of self-help, which requires the collaboration of the agricultural worker himself.

"These conclusions were reached after the completion of a study covering a whole decade of living conditions in the rural sector and of its building systems. Instead of forcing established techniques on the rural worker, the first step was to study his own systems. And it was observed that although earth as a building material might have been misapplied in an unhygienic type of housing unit, unfit for human habitation, there were economic and climatic justifications for its use. Earth costs little, and is markedly athermic. Hence the study and experimental research carried out in connexion with earth-cement, which constitutes one of the basic elements in the Programa de Vivienda Rural Venezolana, and has been one of the chief reasons for the success and acceptance it has met with among the rural population.

"The programme comprises social and economic studies, studies on the utilization of autochthonous materials, designing of a standard housing unit, establishment of credit for rural households, and technical assistance for self-help building projects, and is designed to reach the population living in centres with 100 to 4,999 inhabitants. In six years 21,000 housing units were built, 5,500 of them in 1962 and 8,500 in 1963. In 1964 it is planned to begin the construction of 12,820 dwellings and to complete 11,710."

It will be seen from the foregoing information—unquestionably very fragmentary—that government activities in the field of rural housing have been in close conformity with the wide variety of situations found in the different countries and areas. The available data are still too few and far between to permit systematic study of the various aspects and factors which go to shape the nature and extent of the activities in question.

Part Three

COMMODITY TRADE AND THE BALANCE OF PAYMENTS

Chapter VIII

COMMODITY TRADE

A. AGRICULTURAL COMMODITIES

1. General considerations

The volume of Latin America's agricultural exports increased steadily between 1957 and 1962, and this largely compensated for the sharp drop in agricultural prices during that period. In fact, as may be seen from table 162, the export quantum expanded by 23 per cent between 1957 and 1962, and the value of exports thus recovered, and even slightly exceeded, its 1957 level. The table nevertheless shows that, compared with the world total,[1] the unit value of exports from Latin America dropped more sharply. In other words, the prices paid for agricultural commodities exported from Latin America were, in general, those which decreased the most.

Table 162. Volume and value[a] of world agricultural exports

(*Index: 1952–53=100*)

	1957	*1958*	*1959*	*1960*	*1961*	*1962*[b]
Latin America						
Volume .	111	117	126	129	132	137
Value .	105	98	95	98	101	106
Unit value	95	84	75	76	76	77
World total[c]						
Volume .	122	119	128	136	144	144
Value .	114	105	109	115	119	119
Unit value	93	88	85	84	83	83

Source: FAO, *The State of Food and Agriculture, 1963*, table II-22.

[a] At current prices.

[b] Provisional figure.

[c] Including Africa, Far East (excluding mainland China), Latin America, Near East, North America, Oceania and Western Europe.

The behaviour of commodity exports was not homogeneous. While the volume of cacao exports shrank by 25 per cent between 1957 and 1962, cotton exports expanded by approximately 60 per cent, maize exports by 200 per cent, coffee exports by 20 per cent and exports of other commodities, such as wheat and meat, remained steady. Table 163 also shows that annual fluctuations were fairly violent between 1957 and 1962, chiefly because of variations in domestic supply.

Full data are lacking on 1963 exports, and the figures shown in table 163 are estimates based on incomplete information. The table shows a steep rise in meat sales, which reflects the increase in Argentina's exportable surplus for that year, and bigger sales of coffee. These increases contrast with the sharp contraction in wheat exports and, to a lesser extent, in exports of maize, linseed oil and wool. As will be seen in greater detail in the sections on individual commodities, it is thought that Argentina's grain exports will recover, as a result of the substantial increase in output expected for the current year.

With respect to forest products, exports of roundwood rose from 635,000 m^3 in 1960 to 865,000 in 1962, while sawnwood exports fell sharply in 1962, chiefly as a result of the import restrictions imposed by Argentina, which mainly affected Brazil, Chile, and Paraguay, its traditional suppliers. For the same reason, exports of sleepers, which rose from 24,000 m^3 in 1960 to 28,000 in 1961, dropped to less than 20,000 m^3 in 1962. Plywood exports remained fairly steady between 20,000 and 24,000 m^3 (see table 164).

As already pointed out in an earlier paragraph, the prices of Latin America's staple agricultural exports have been declining persistently in the past few years. Table 165 shows that the decline was uneven in pattern, depending upon the commodity concerned. In cases such as that of cacao, it was fairly marked, falling from an average of 44 cents per pound in 1958 to 22.5 cents per pound in 1961 and a little over 21 cents in 1962. There was a slight recovery during the first few months of 1963, although levels were still far below those of the previous four or five years. Banana prices also dropped sharply, from 16.3 cents per kg (price in the United States) in 1958 to 13.3 cents in 1962. Coffee prices suffered the same fate, since they declined from 48.4 cents a pound in 1958 (Santos No. 4) to less than 34 cents in 1963 (average for the first nine months). At the end of 1963, however, prices jumped up again and continued to rise during the first few months of 1964. It was undoubtedly sugar that registered the most spectacular price movement. For the reasons explained in greater detail in the section on sugar, prices virtually quintupled between the first quarter of 1962, when they were extraordinarily low, and the last quarter of 1963.

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[1] Excluding the centrally planned economies.

These price declines naturally had a different effect on individual Latin American countries, depending upon the composition of their exports. But the outcome for the region as a whole has been a substantial reduction in the export earnings that it could have obtained from the increase in the volume of exports. It was not until the end of 1963 that the downward trend of world commodity prices, which had been so marked for sugar and coffee, began to reverse itself. Other commodities are also expected to benefit from this reversal, but it would be premature to conclude that the positive trend will be maintained for some time to come.

Table 163. Latin America: Volume of exports of major commodities

(*Millions of tons*)

Commodity	*1957*	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*[a]
Wheat and wheat flour[b]	2.83	2.45	2.48	2.49	1.10	2.75	1.54
Maize	0.84	1.74	2.74	3.11	1.79	2.60	2.33
Rice[c]	0.13	0.17	0.13	0.13	0.33	0.28	...
Sugar[d]	7.37	7.78	6.98	8.80	9.52	7.59	6.20
Bananas	2.63	2.79	2.94	3.13	3.11	3.00	...[e]
Linseed and linseed oil[f]	0.17	0.18	0.23	0.21	0.27	0.29	0.25
Coffee	1.57	1.56	1.87	1.85	1.83	1.89	1.98
Cacao	0.20	0.19	0.17	0.23	0.18	0.15	0.14
Cotton[g]	0.52	0.59	0.73	0.62	0.76	0.85	...[h]
Wool[i]	0.13	0.18	0.20	0.19	0.23	0.24	0.21
Meat[j]	0.50	0.52	0.47	0.42	0.40	0.52	0.75
Canned meat	0.14	0.13	0.11	0.08	0.11	0.12	...

SOURCE: *The State of Food and Agriculture, 1963*, op. cit., Annex, table 7-B (see table 169).

[a] Estimates based on partial preliminary data.

[b] Wheat equivalent.

[c] Milled equivalent.

[d] Raw equivalent.

[e] In ten South American countries, representing virtually half Latin America's total exports, an increase of 17 per cent was registered between 1962 and 1963.

[f] Oil equivalent.

[g] Lint.

[h] During the period January–October the combined exports of Mexico and the South American countries fell by about 12 per cent compared with the figures for the same period in 1962.

[i] Actual weight.

[j] Fresh, chilled and frozen beef, veal, mutton, lamb and pork.

Table 164. Latin America: Exports of forest products

Product	*Unit*	*1960*	*1961*	*1962*
Roundwood	1,000 m^3	635	730	865
Sleepers	1,000 m^3	24	28	19
Sawnwood	1,000 m^3	1,405	1,572	1,099
Plywood	1,000 m^3	20	24	24
Particle board	Thousands of tons	6	10	10
Fibreboard	Thousands of tons	—	3	3

SOURCE: FAO, *Yearbooks of Forest Products Statistics.*

As for imports of agricultural commodities, these have been steadily increasing in volume ever since the early post-war years and finally levelled out—in the three-year period 1960–62—at a point some 30 per cent higher than in 1948–52. Because of the reduction in prices, the value of such imports rose by only 11 per cent during the same period (see table 166).

The salient items imported were cereals, livestock products, sugar, vegetable and animal fibres, beverages, fruit, tobacco and rubber. The most spectacular increase was registered by intra-regional imports of livestock products, followed by imports of wheat, which climbed to 4.2 million tons a year in 1960–62 from 2.8 million tons in the five-year period 1948–52.

A sizable proportion of the agricultural commodities imported by the deficit countries came from other parts of Latin America. On the whole, it is estimated that some 50 per cent was provided by trade between the Latin American countries, the proportions varying from commodity to commodity. A substantial part of the remainder was obtained on special terms from the United States under the provisions of Public Law 480. The data available indicate that 36 per cent of the wheat and flour, 62 per cent of the feed grains and 6 per cent of the rice imported between 1959 and 1961 was brought into Latin America on non-commercial terms.

Imports of forest products have tended to decline in the last few years. Roundwood imports dropped by about 25 per cent between 1960 and 1962, thus contrasting sharply with exports of roundwood during the same period, which rose by 36 per cent. This discrepancy reflects the tendency for wood to be processed outside the producing countries, obviously to the detriment of the latter. In the case of sawnwood, import restrictions imposed by Argentina were the main reason for the decline in imports. As regards pulp and paper (including paperboard), which constitute the main forest products imported into Latin America, the over-all value of purchases remained at around 200 million dollars, in spite of a 5-per-cent contraction in the volume imported between 1960 and 1962 as a result of intensified domestic duction. As will be seen from table 167, imports of sleepers, plywood and other types of wood also fell off.

Table 165. Latin America: International prices of some staple agricultural exports
(*Index: 1959=100*)

Commodity	*1959*	*1960*	*1961*	*1962*				*1963*			
				I	II	III	IV	I	II	III	IV
Wheat[a]	98	99	104	104	105	105	101	99	[j]	102	...
Maize[a]	100	102	100	99	99	96	100	102	109	115	...
Coffee[b]	76	76	74	70	71	70	69	69	69	68	...
Cacao[c]	82	62	52	49	48	49	51	61	63	60	...
Sugar[d]	85	89	83	70	75	89	107	172	265	221	335[k]
Beef[e]	109	109	103	112	108	114	95	86	102	113	...
Linseed oil	92	96	105	103	100	93	84	81	81	77	...
Bananas[f]	92	91	89	99	116	95	72	68[l]	...	...	...
Clean-scoured wool[g]	95	90	83	86	93	94	94	99	100	101	...
Cotton[h]	89	92	95	93	93	90	90	92	90	91	...
Henequen[i]	114	138	120	120	124	124	138	154	...	...	...

SOURCE: ECLA, on the basis of official statistics.

[a] Price c.i.f. London for Argentine wheat.

[b] Santos No. 4, New York.

[c] Spot price, in bond, New York, for Bahía cacao.

[d] World price.

[e] London, for Argentine chilled hinds.

[f] Price in the Federal Republic of Germany for Ecuador bananas.

[g] Montevideo super 0's in bond, Boston.

[h] Price c.i.f. Liverpool, Mexican Matamoros 1-1/32″.

[i] Mexican class A, f.a.s. New York.

[j] No quotation available.

[k] Average November quotation.

[l] January quotation.

Table 166. Latin America: Volume and value of agricultural imports[a]
(*Index*: 1952–53=100)

	1948–52	*1955–57*	*1960*	*1961*	*1962*[b]
Volume	91	108	118	121	119
Value	88	95	96	96	98

SOURCE: *The State of Food and Agriculture, 1963*, op. cit.

[a] Including intra-regional imports.

[b] Provisional figure.

Table 167. Latin America: Imports of forest products

Product	*Unit*	*1960*	*1961*	*1962*
Roundwood	1,000 m³	429	377	323
Sleepers	1,000 m³	25	17	19
Sawnwood	1,000 m³	1,165	1,418	1,105
Plywood	1,000 m³	20	31	30
Particle board	Thousands of tons	8	6	4
Fibreboard	Thousands of tons	18	12	15
Pulp	Thousands of tons	343	384	312
Newsprint	Thousands of tons	543	595	539
Other paper and board	Thousands of tons	350	316	311

SOURCE: FAO, *Yearbooks of Forest Products Statistics.*

2. REVIEW OF SELECTED AGRICULTURAL COMMODITIES

(a) *Cotton*

(i) *Production*

Between 1959/60 and 1962/63 cotton production in market economy countries increased by 18 per cent, thereby reaching the unprecedented figure of 36.8 million bales. If the output in the centrally planned economies is taken into consideration, the increase in world production would be much less—47.3 to 48.7 million bales, or 3 per cent—as output in those countries dropped from 16 million bales in 1959/60 to 12 million in 1962/63 (see table 168).

The extraordinary rise in the volume of cotton produced by the market economy countries was due to substantial increases in Asia and Oceania (2.4 million bales) and Latin America (2.2 million bales) and to smaller increments in the United States (350,000 bales), Western Europe[2] (325,000) and Africa (250,000).

The sharp rise in Latin America's cotton production between 1959/60 and 1960/63 was attributable primarily to Mexico (750,000 bales), Brazil (600,000), three Central American countries—El Salvador, Nicaragua and Guatemala—(550,000), and Argentina (150,000).[3] As a result, Latin America's share of world production (excluding the countries with centrally planned economies) expanded from 20 per cent in 1959/60 to 25 per cent in 1962/63.

In Argentina and Brazil the improvement was due to a slight increase in the area sown to cotton and a relatively small rise in fibre yield. In Mexico, notwithstanding an 8-per-cent reduction in the cotton-growing area, the fairly high rise in yield—from 477 kg to 628 kg—contributed to the substantial increase in production (see table 169).

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[2] Greece and Spain.

[3] It should nevertheless be pointed out that Mexico's 1959/60 output of 1.66 million bales was the lowest in the past ten years. The production of the three Central American countries was also fairly low that year.

With respect to the three main Central American producers—El Salvador, Nicaragua and Guatemala—the rise in output came about for different reasons. In El Salvador the area under cotton more than doubled between 1959/60 and 1962/63, from 38,000 to 81,000 hectares. Yield also increased substantially from 786 to 864 kg per hectare during the same period. In Nicaragua there was a far smaller increase in the area sown to cotton (67,000 to 89,000 hectares), but yield improved to an extraordinary extent from 423 kg to 791 kg per hectare. The area sown to cotton in Guatemala quadrupled (from 18,000 hectares to 72,000 hectares), but over the same period yield dropped from 791 to 729 kg per hectare.

Table 168. **Raw Cotton: Latin American and world production**[a]

(*Thousands of 478-lb or 216.8-kg bales*)

Region or country	*Average 1956/57 to 1958/59*	*1959/60*	*1960/61*	*1961/62*	*1962/63*[b]
Argentina	574	430	559	500	580
Brazil	1,350	1,700	1,950	2,500	2,300
Colombia	129	310	308	360	380
Costa Rica	4	5	5	5	7
Cuba	1	3	20	18	30
Ecuador	14	11	11	11	15
El Salvador	164	140	185	260	325
Guatemala	62	65	95	145	242
Haiti	5	6	5	5	5
Honduras	13	5	6	17	21
Mexico	2,114	1,660	2,100	1,990	2,410
Nicaragua	209	130	150	250	325
Paraguay	47	20	35	50	55
Peru	515	643	557	660	680
Venezuela	28	40	30	35	30
Others	6	7	9	8	10
TOTAL LATIN AMERICA	5,234	5,175	6,015	6,814	7,415
United States	11,830	14,553	14,453	14,448	14,890
Asia and Oceania	7,488	6,819	8,172	8,147	9,185
Africa	3,679	4,085	4,173	3,580	4,331
Western Europe[c]	516	619	657	973	943
Sub-total	23,513	26,078	27,455	27,148	29,349
TOTAL[d]	28,747	31,253	33,480	33,962	36,764
Soviet Union	6,833	7,400	6,850	7,050	6,700
Eastern Europe[e]	109	113	116	65	80
Mainland China	7,167	8,500	6,500	5,000	5,200
Sub-total	14,109	16,013	13,466	12,115	11,980
WORLD TOTAL	42,856	47,266	46,946	46,077	48,744

SOURCE: International Cotton Advisory Committee, *Cotton—World Statistics*, October 1963.

[a] Crop years from August to July.

[b] Estimate.

[c] Greece, Italy, Spain and Yugoslavia.

[d] Excluding mainland China, Eastern Europe and the Soviet Union.

[e] Albania, Bulgaria and Romania.

It should be pointed out that the average cotton yield of the Latin American countries, as shown in table 169, is 512 kg per hectare, a figure which compares favourably with the world average of 324 kg. The yields of the three main Central American producers are among the highest in the world. In fact, the 1962/63 figures of 864, 791 and 729 kg for El Salvador, Nicaragua and Guatemala respectively were exceeded only by Israel, with 1,018 kg per hectare. The high yields in the first three countries are due to their comparative advantages as regards natural conditions, which include deep and fertile volcanic soil on the coastal plains of the Pacific and a rain régime that favours cotton sowing and growth in the rainy season and harvesting during the dry months.

The increase in yield and its maintenance at a high level in recent years is partly due to the large size of most of the Central American cotton plantations, which has permitted the introduction of modern cultivation techniques and their improvement with the years.

According to an estimate made by the International Cotton Advisory Committee, approximately 85 per cent of world cotton production in 1962/63 consisted of short staple (less than $\frac{7}{8}$" in length) and medium staple (between $\frac{7}{8}$" and $1\frac{1}{8}$"), 9 per cent of long staple (from $1\frac{1}{7}$" to $1\frac{5}{16}$") and the remaining 6 per cent of extra-long-staple cotton (over $1\frac{5}{16}$" in length).

Virtually all the cotton grown in Latin America is of the medium-staple variety. In 1962/63, 10 per cent of the total regional harvest (7.4 million bales) was long staple and 2.5 per cent extra-long staple. These characteristics facilitate exports and help to raise the average price received by the exporting countries of Latin America.

Table 169. Latin America: Cotton-growing area and yield per hectare

Country	*Area (Thousands of hectares)*					*Yield (Kg/hectare)*				
	Average 1956/57 to 1958/59	*1959/60*	*1960/61*	*1961/62*	*1962/63*[a]	*Average 1956/57 to 1958/59*	*1959/60*	*1960/61*	*1961/62*	*1962/63*[a]
El Salvador .	44	38	51	73	81	819	786	789	773	864
Nicaragua .	68	67	61	77	89	670	423	534	701	791
Guatemala .	20	18	26	46	72	713	791	794	690	729
Mexico .	941	754	904	794	833	487	477	503	542	628
Peru . .	238	253	261	175	275	471	517	503	529	501
Colombia .	76	151	149	166	182	372	445	447	471	453
Argentina .	561	461	503	537	526	220	193	245	202	258
Brazil . .	1,619	1,862	2,023	2,226	2,226	188	198	208	243	224
Paraguay .	58	40	61	71	75	171	108	126	154	159
TOTAL AREA .	3,625	3,644	4,039	4,265	4,359					
Average yield						*458*	*438*	*461*	*478*	*512*

SOURCE: As for table 168.

[a] Estimate.

Peru, Brazil and Mexico are the Latin American producers of long-staple cotton. In 1962/63 they respectively produced 495,000, 150,000 and 100,000 bales of this type of cotton, which amounted to 745,000 bales altogether, or 24 per cent of world output. Peru is the only producer of extra-long staple in the region, and supplied 183,000 bales in 1962/63 or 9 per cent of the world total for this kind of cotton.

(ii) *Consumption and exports*

Since the Korean hostilities, expansion of world cotton production has almost invariably been accompanied by an increase in consumption. Moreover, since 1956, when cotton stocks amounted to 22.4 million bales, world consumption has regularly exceeded output, which has meant that substantial inroads have been made upon surpluses. These were reduced by 5.3 million bales to a level of 17.1 million between 1956 and 1962 (see table 170).

The high world demand for cotton is partly a result of the rapid increase in textile production in developing countries, and has been particularly influenced by the fact that the textile cycle occurs at different times in the main consumer countries. In other words, a drop in cotton consumption in the United States was offset, to a greater or lesser extent, by a rise in consumption in Western Europe and Japan, and *vice versa.*

The recent exception took place in 1957/58, when the cyclical decline in the industry coincided in the United States, Western Europe and Japan, resulting in a drop of 1.1 million bales in world consumption. After this interruption, the normal pattern reappeared the following year.

There was a repetition of the occurrence in 1962/63, when cotton consumption fell sharply in the United States (by 525,000 bales) and to a lesser extent in Japan (by 256,000 bales) and Western Europe (by 168,000). This brought world consumption down from 32.6 million to 31.6 million bales—a reduction of 1 million in the previous year's figure (see again table 170).

Apart from these cyclical factors, mention should be made of the long-term trend towards replacement of cotton by man-made fibres. World production of such fibres is growing rapidly and cotton's share of total textile fibre consumption shrank from 70 to 65 per cent between 1958 and 1963.

Table 170. Cotton: World consumption and stocks at end of season
(*Millions of 478-lb. or 216.8-kg bales*)

	Average 1956/57 to 1958/59	*1959/60*	*1960/61*	*1961/62*	*1962/63*
Consumption					
United States .	8.4	9.0	8.3	9.0	8.4
Other countries	20.6	22.2	23.3	23.6	23.2
TOTAL	29.0	31.2	31.6	32.6	31.6
Stocks					
United States .	11.5	8.9	7.6	7.2	7.8
Other net exporters .	3.3	3.7	3.2	3.5	3.8
Net importers .	5.8	5.4	6.0	6.6	5.5
TOTAL	20.6	18.0	16.8	17.3	17.1

SOURCE: As for table 168.

As part of the general pattern described earlier, between 1959/60 and 1962/63 world cotton exports (excluding those from the Soviet Union, Eastern Europe and Mainland China) dropped by 700,000 bales, from 15.2 million to 14.5 million (see table 171).[4]

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[4] If these countries were included, the reduction would amount to 1.5 million bales, since their exports during the same period showed a decrease of 800,000 bales.

The main feature of international cotton trade in recent years has been the steady reduction in United States cotton exports and the correlative increase in exports from other areas, as may be seen from table 172. In fact, between 1959/60 and 1962/63, total cotton exports from the United States dropped by 3.8 million bales from the unusually high figure of 7.2 million to only 3.4 million. Between the first and last years mentioned, specially financed exports remained fairly stable[5] at around 1.7 million bales. However, commercial exports fell from 5.7 million to 1.7 million bales. It seems that, for lengthy periods, particularly during the first few months of each cotton season, United States cotton prices were unable to compete with those of cotton from other areas. United States cotton was thus partly ousted from the world market by production from other areas, which was offered at more competitive prices.

Table 171. Raw cotton: Latin American and world exports

(Millions of 478-lb or 216.8-kg bales)

Region or country	*Average 1956/57 to 1958/59*	*1959/60*	*1960/61*	*1961/62*	*1962/63*[a]
Mexico	1,505	1,298	1,602	1,488	2,000
Brazil	280	448	698	851	1,050
Peru	455	431	499	602	616
El Salvador	160	113	139	210	320
Nicaragua	209	115	139	242	285
Argentina	32	31	76	142	220
Guatemala	48	52	75	115	212
Colombia	—	51	119	133	115
Paraguay	33	5	20	29	40
Honduras	10	5	4	15	19
Others	7	9	9	4	7
TOTAL, LATIN AMERICA	2,738	2,538	3,380	3,831	4,884
United States	5,368	7,182	6,632	4,913	3,351
Asia and Oceania	1,666	1,652	1,539	1,963	2,594
Africa	2,853	3,698	3,253	2,824	3,321
Western Europe[b]	156	154	151	311	340
Sub-total	10,043	13,686	11,575	10,011	9,606
TOTAL[c]	12,781	15,224	14,955	13,842	14,450
Soviet Union	1,500	1,800	1,750	1,600	1,300
Eastern Europe	5	7	5	8	5
Mainland China	173	275	100	—	—
Sub-total	1,678	2,082	1,855	1,608	1,305
WORLD TOTAL	14,459	17,306	16,820	15,450	15,795

SOURCE: As for table 168.

[a] Estimate.

[b] 1956/57 to 1960/61: Greece only; 1961/62 and 1962/63: Greece and Spain.

[c] Excluding mainland China, Eastern Europe and the Soviet Union.

The sharp drop in cotton exports from the United States, due chiefly to the reduction of its commercial sales abroad, has been particularly favourable for the Latin American countries, which substantially increased their output and were able to export an extra 2.4 million bales, thereby increasing their sales from 2.5 million to 4.9 million bales during the period in question. Every Latin American exporter benefited, and more especially Brazil, Colombia, El Salvador, Guatemala, Mexico, Nicaragua and Peru (see again table 171).

During the same period, exports from Asia and Oceania rose by 900,000 bales and those from Western Europe—which accounted for a smaller share of the world total—by 186,000 bales. Meanwhile exports from Africa dropped by nearly 400,000 bales.

As a result, Latin America's share of world cotton trade increased from 17 to 34 per cent between 1959/60 and 1962/63, while that of the rest of the world expanded from 36 to 43 per cent. The contribution made by the United States shrank from 47 per cent to 23 per cent (see again table 172).

(iii) *Prices*

Owing to the preponderant role played by the United States in cotton production and trade, its cotton policy had a major influence on world cotton prices up to 1955, because United States support prices helped to maintain world cotton quotations at a high level. In 1955 the United States launched its special export programme aimed at securing a "fair share" of the world market, and since then world prices have taken a downward turn, periods of sharp decline alternating with those of partial recovery.

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[5] Sales financed under the Mutual Security Act and Public Law 480, transactions effected through the Export-Import Bank and barter operations.

This trend seems to have continued until the 1959/60 cotton season, when United States cotton exports reached a peak of 7.2 million bales. From then on they steadily declined. However, between that year and 1961/62, world cotton consumption increased by 1 million bales, a factor which helped to keep prices steady. In the following year consumption was reduced by 1 million bales, and world cotton prices sagged.

Table 172. **Raw cotton: United States and world exports**

(Millions of 478-lb or 216.8-kg bales)

	1958/59	*1959/60*	*1960/61*	*1961/62*	*1962/63*[a]
United States					
Specially financed exports[b]	2.2	1.5	2.1	1.6	1.7
Commercial exports	0.6	5.7	4.5	3.3	1.7
TOTAL	2.8	7.2	6.6	4.9	3.4
Other countries					
Latin America	3.3	2.5	3.4	3.8	4.9
Rest of world	5.3	5.5	5.0	5.1	6.2
WORLD EXPORTS[c]	11.4	15.2	15.0	13.8	14.5
Soviet Union, Eastern Europe and mainland China	2.1	2.1	1.9	1.6	1.3
WORLD TOTAL	13.5	17.3	16.8	15.5	15.8
United States/world exports (percentage)	24.6	47.4	44.0	35.5	23.4
Latin America/world exports (percentage)	28.9	16.4	22.7	27.5	33.8
Rest of world/world exports (percentage)	46.5	36.2	33.3	37.0	42.8

SOURCE: As for table 168.

[a] Estimate.

[b] United States Department of Agriculture, *Statistics on Cotton and Related Data 1925–1962*, Washington, 1964, p. 13.

[c] Excluding the Soviet Union, Eastern Europe and mainland China.

In 1958 the main Latin American export varieties were quoted at a fairly high price in Liverpool. Prices dropped sharply in 1959, recovering somewhat by the following year for medium-staple cotton and more substantially for long-staple cotton, which exceeded its 1958 levels. Since 1961, the price trends for the different varieties of Latin American cotton have followed divergent courses (see table 173).

Matamoros cotton from Mexico was quoted at an average of 30.49 dollar cents per pound in 1961, dropping to 29.45 cents in 1962 and remaining stable at around 29.30 cents during the first nine months of 1963. The price of Nicaraguan cotton (SM $1\frac{1}{16}''$) began to recover slightly after 1960, when its average was 28.91 cents per pound, and climbed to 30.21 cents in 1962. However, during the first few months of 1963, it fell to an average of 28.84 cents.

In 1960 the average quotation for type 5 long-staple Tanguis cotton from Peru was 35.66 cents per pound, or 1.98 cents more than in 1959. The price remained steady at nearly 33 cents in 1961 and 1962, and then rose to 34.94 cents in the first nine months of 1963, or 1.26 cents above the 1958 figure but 0.72 cents below that of 1960.

Lastly, extra-long-staple Pima cotton from Peru, which in 1958 had been quoted at 41.84 cents a pound, and had dropped to 36.69 cents in the following year, reached its peak in 1960 when it was sold at 46.31 cents a pound. But the price has declined steadily ever since averaging 38.73 cents for the first nine months of 1963.

(iv) *Prospects*

Preliminary estimates indicate that world cotton production in 1963/64 will probably be 1.7 million bales less than in the previous year, dropping from 36.7 million to 35 million.[6] About half the reduction will correspond to the United States, where production is expected to decline from 14.9 million to 14 million bales. Output in the rest of the world is expected to drop from 21.8 million bales to 21 million.

The sharpest declines will probably take place in Egypt, India, Mexico and Spain, either because of reductions in the area sown to cotton or because of a slight decrease in yield in some of these countries in comparison with the particularly high figures recorded in 1962/63. Production is likely to go up in Brazil, Greece, Japan and the Central American countries, as most of them have increased their cotton-growing area, and, except in a few cases, weather conditions have been good.

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[6] Excluding the Soviet Union, Eastern Europe and mainland China.

As regards Latin America's production, Mexico's estimated output will be 2 million bales, or 400,000 less than in 1962/63. In the Matamoros area any reduction can be attributed to the drought in the early stages of the harvest, followed by persistent rain and plagues of insects, all of which lowered the yield. In Colombia, less ground will be sown to cotton in the central zone and output will be smaller because in the period before planting the growers did not know what support prices were to be and credit facilities were inadequate.

Table 173. Raw Cotton: International prices[a]

(Dollar cents per pound)

	Mexican Matamoros 1-1/32"	*Nicaragua SM 1-1/16"*	*United States Memphis Territory SM 1-1/16"*	*Peru*		*Mexican Matamoros 1-1/32"*	*Nicaragua SM 1-1/16"*	*United States Memphis Territory SM 1-1/16"*	*Peru*	
				Tanguis type 5	*Pima No. 1 1-9/16"*				*Tanguis type 5*	*Pima No. 1 1-9/16"*
	1958					*1959*				
Quarterly average										
I	34.67	32.58	36.45	34.32	51.06	28.30	25.72	33.27	28.56	34.01
II	33.45	31.45	35.71	32.12[b]	41.92	28.29	27.57	30.52	31.69	35.34
III	30.56	30.17	34.94	34.42	38.08	28.03[c]	27.53	28.97	33.92[d]	37.43
IV	29.85	28.01	34.22	32.81	36.30	29.26	28.73	29.55	—	39.98
Annual average .	32.13	30.55	35.33	33.68[e]	41.84	28.49[f]	27.39	30.58	31.07[g]	36.69
	1960					*1961*				
Quarterly average										
I	29.34	28.67	29.78	38.64	47.27	30.49	30.35	31.36	33.81	45.00
II	29.34	28.44	30.35	37.64	47.59	30.65	29.95	32.05	32.31	41.80
III	29.82	28.76	30.14	33.22	43.82	30.56	30.16	30.65	32.67	39.79
IV	30.14	29.78	30.61	33.12	46.17	30.26	29.78	31.13	33.12	44.02
Annual average .	29.66	28.91	30.22	35.66	46.21	30.49	30.06	31.30	32.98	42.65
	1962					*1963*				
Quarterly average										
I	30.03	29.94	31.46	32.39	41.83	29.67	29.42	31.61	34.56	39.49
II	29.89	29.93	31.70	33.09	39.97	29.03	28.85	30.23	34.30	38.08
III	28.95	29.09	30.38	32.69	38.60	29.21[h]	28.26	29.20	35.96	38.61
IV	28.94	31.89	30.31	33.43	38.46					
Annual average .	29.45	30.21	30.96	32.90	39.72	29.30[i]	28.84[i]	30.35[i]	34.94[i]	38.73[i]

SOURCE: *Cotton—World Statistics*, op. cit., April and October 1963.

[a] Price c.i.f. Liverpool.

[b] Quotation for the month of April only.

[c] Average for the months of July and September only. As from 1 September 1959, the price is based on SM 1-1/16".

[d] Average for the months of July and August only.

[e] Ten-month average.

[f] Eleven-month average.

[g] Eight-month average.

[h] As from 1 August 1963, the quotation relates to Laguna cotton, SM 1-1/16".

[i] Nine-month average.

The 1963/64 crop in the north of Brazil is good and is expected to total 900,000 bales. Because of an increase in minimum support prices both the area under cultivation and output in southern Brazil are expected to exceed the figures for the previous season.

Good profits for cotton growers in Central America during the last two years have led to an increase in the area under cultivation, which was 20 per cent more than in the previous year, and twice as much as the average for 1955–59. If average yield keeps close to the figure of 800 kg per hectare achieved in 1962/63, it is quite likely that El Salvador, Guatemala and Nicaragua will each produce over 300,000 bales in the present season.

According to surveys conducted by the United States Department of Agriculture,[7] the five Central American countries could expand their cotton output from the total amount of 920,000 bales harvested in 1962/63 to around 1.5 million bales by 1967/68.

(b) *Sugar*

As a result of the exclusion of Cuban sugar from the United States market after July 1960, there have been basic structural changes in the world sugar market. Cuban sugar exports began to be diverted on a large scale towards the Soviet Union, the countries of Eastern Europe and mainland China.

This change in the direction of the Cuban sugar trade created a substantial gap in the United States market, which has been supplied by sugar from other sources, mainly Latin America. Furthermore, as a result of this development, the Latin American countries have abandoned their traditional markets, which were chiefly in Western Europe.

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[7] United States Department of Agriculture, *Cotton Production in Central America*, FAS M-154, Washington, 1963, p. 2.

such exports because of the higher unit price prevailing at the time in the United States market in comparison with world prices.

Table 174. **Centrifugal sugar: Latin American and world production, 1954–63**
(*Thousands of tons, raw value*)

	1954	*1955*	*1956*	*1957*	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*[a]
Cuba	4,890	4,528	4,740	5,672	5,784	5,964	5,862	6,767	4,815	3,800
Rest of Latin America										
Brazil	2,118	2,073	2,268	2,714	3,004	3,108	3,319	3,354	3,238	3,215
Mexico	894	961	823	1,164	1,210	1,448	1,518	1,488	1,531	1,651
Dominican Republic .	658	637	780	836	838	809	1,112	873	902	816
Argentina . . .	837	628	792	714	1,102	969	815	671	799	778
Peru	612	652	690	677	681	705	807	799	765	750
Sub-total	(5,119)	(4,951)	(5,353)	(6,105)	(6,835)	(7,039)	(7,571)	(7,185)	(7,235)	(7,210)
Colombia . . .	241	253	261	234	264	277	328	363	402	440
Venezuela . . .	102	157	216	210	170	190	195	261	280	269
Ecuador	52	67	75	76	87	100	103	140	140	135
Guatemala . .	46	48	52	60	63	61	73	83	117	127
Haiti	46	56	59	57	46	47	60	72	69	61
Nicaragua . .	34	37	33	41	61	64	65	63	86	84
Chile	5	7	13	21	34	44	79	59	73	73
Costa Rica . .	32	34	24	30	38	56	60	70	92	77
El Salvador . .	30	35	36	46	42	46	50	51	64	70
Bolivia	6	8	8	10	17	18	26	44	49	60
Uruguay . . .	31	18	22	27	29	32	35	43	47	54
Paraguay . . .	16	13	19	29	35	32	30	31	35	34
Panama	18	16	16	23	25	27	25	28	28	34
Honduras . . .	7	8	13	13	14	15	20	24	23	24
Sub-total	(666)	(757)	(847)	(877)	(925)	(1,009)	(1,149)	(1,332)	(1,505)	(1,542)
TOTAL: rest of Latin America . . .	*5,785*	*5,708*	*6,200*	*6,982*	*7,760*	*8,048*	*8,720*	*8,517*	*8,740*	*8,752*
TOTAL: Latin America .	10,675	10,236	10,940	12,654	13,544	14,012	14,582	15,284	13,555	12,552
WORLD TOTAL	37,373	38,925	40,217	43,992	47,210	49,557	52,091	54,749	51,586	49,556
Latin American production/world total (percentage) . . .	28.6	26.3	27.2	28.8	28.7	28.3	28.0	27.8	26.3	25.4
Cuban production/world total (percentage) .	13.1	11.6	11.8	12.9	12.3	12.0	11.3	12.4	9.3	7.7
Exports from rest of Latin America/world total (percentage) . .	15.5	14.7	15.4	15.9	16.4	16.2	16.7	15.6	16.9	17.7
Cuban production/Latin American total (percentage) . . .	45.8	44.2	43.3	44.8	42.7	42.6	40.2	44.3	35.5	30.4

SOURCES:
1954–59: International Sugar Council, *Sugar Yearbook, 1960*, pp. 200–207.
1960–62: International Sugar Council, *Statistical Bulletin*, vol. 22, No. 6, June 1963, pp. 2–4.
1963: United States Department of Agriculture, *World Agricultural Production and Trade*, June 1963, pp. 24 and 25.

[a] Estimates.

The net balance has favoured the other sugar-exporting Latin American countries for two main reasons. In the first place, these countries were stimulated by the opening up of the United States market to increase their output by about 10 per cent and their exports more than proportionately by liquidating most of their stocks. In the second place, far greater earnings were obtained from

(i) *Production*

Over the long term, production of sugar in Latin America excluding Cuba showed a tendency to increase substantially in response to the rise in world sugar demand and consumption after the Second World War. Thus, between 1954 and 1959, the output of this group of countries climbed from 5.8 million tons to 8.0 million.

In 1960, the opening up of new opportunities in the United States market led the group to increase its production by a further 9 per cent to 8.7 million tons, a level which was more or less maintained during the next three years (see table 174).

Table 175. Sugar: Latin American and world exports

(*Thousands of tons, raw value*)

	1954	*1955*	*1956*	*1957*	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*[a]
Cuba	4,226	4,644	5,394	5,307	5,632	4,952	5,635	6,414	5,131	3,300[b]
Rest of Latin America										
Dominican Republic .	532	601	717	795	691	694	1,099	793	846	
Brazil	151	581	23	409	776	606	855	745	479	
Peru	422	483	428	496	411	499	514	552	463	
Mexico	73	80	34	94	187	135	462	612	350	
Argentina	—	90	—	96	—	—	113	187	33	
Sub-total	(1,178)	(1,835)	(1,202)	(1,890)	(2,065)	(1,934)	(3,043)	(2,889)	(2,171)	(2,500)[c]
Colombia	—	30	58	3	—	—	—	46	66	
Ecuador	—	—	—	10	22	33	14	48	64	
Haiti	15	21	28	24	6	6	30	40	35	
Nicaragua . . .	11	9	4	9	22	25	35	28	40	
Costa Rica . . .	6	7	11	1	1	7	20	30	24	
El Salvador . . .	2	2	1	8	8	7	11	13	21	
Guatemala . . .	—	—	—	1	—	—	6	7	35	
Panama	3	5	5	5	5	5	3	5	4	
Paraguay	—	—	—	—	5	15	1	4	3	
Venezuela	—	—	34	114	15	—	—	—	—	
Bolivia	3	4	3	1	—	—	—	—	—	
Sub-total	(40)	(78)	(133)	(176)	(84)	(98)	(120)	(221)	(292)	(400)[d]
TOTAL: rest of Latin America . . .	1,218	1,913	1,335	2,066	2,149	2,032	3,163	3,110	2,463	2,900
TOTAL: Latin America .	5,444	6,557	6,729	7,373	7,781	6,984	8,798	9,524	7,594	6,200
WORLD TOTAL	13,357	14,496	14,127	15,383	15,715	14,835	19,252	22,254	20,573	...
Latin American exports/ world total (percentage)	40.8	45.2	47.6	47.9	49.5	47.1	45.7	42.8	36.9	...
Cuban exports/world total (percentage) .	31.6	32.0	38.2	34.5	35.8	33.4	29.3	28.8	24.9	...
Exports from rest of Latin America/world total (percentage) . .	9.1	13.2	9.4	13.4	13.7	13.7	16.4	14.0	12.0	...
Cuban exports/Latin American total (percentage) . . .	77.6	70.8	80.2	72.0	72.4	70.9	64.0	67.3	67.6	53.2

SOURCES: 1954–59: International Sugar Council, *Sugar Yearbook 1960*, pp. 220–224; 1960–62: International Sugar Council, *Statistical Bulletin*, op. cit., pp. 7 and 8.

[a] Over-all estimates, except for Cuba.

[b] Central Planning Board.

[c] Average 1961–62.

[d] A total increase of about 30 per cent has been assumed, similar to that for 1961 and 1962.

Cuban production, on the other hand, has gone through a number of phases. Between 1953 and 1956 it was restricted, because of the exceptional harvest of 7.22 million tons obtained in 1952, and, as a result, average annual sugar production during the three-year period 1954–56 was only 4.72 million tons. During the three years from 1957 to 1959, when the period of maximum restriction came to an end and the excess stocks were disposed of, it was possible to increase average annual output to 5.8 million tons, and this high level was maintained in 1960.

In 1961 the harvest was unrestricted, and all stocks of cane were ground; as a result, output rose to 6.8 million tons, the highest level reached in Cuba since the 1952 record. In 1962, the reduction in the cane-growing area[8] and a prolonged drought lowered Cuban production by 2 million tons, from 6.77 million tons to 4.82 million. According to provisional estimates (since no official figures are published for sugar production), the 1963 harvest is unlikely to exceed 3.8 million tons.

Thus between 1959 and 1963 the share of Cuban sugar in the world total shrank from 12 to 8 per cent, and in the Latin American total from 43 to 30 per cent. The share of the other Latin American countries in the world total, rose, on the contrary, from 16 to 18 per cent between those two years (see again table 174).

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[8] After the bumper harvest of 1961 it was decided to devote part of the land under sugar cane to other crops.

(ii) *Exports*

The course followed by sugar exports from the rest of Latin America has been even more striking than the rather high growth rate recorded for production between 1954 and 1959 (see table 175). During this period exports expanded at an extraordinary rate, the total increase being about 67 per cent—from 1.2 to 2.0 million tons. In 1960, there was a further spectacular increase of over a million tons in sugar exports from this group of countries; production rose from 2 million tons to 3.16 million between 1959 and 1960, i.e., 58 per cent. This was partly due to an expansion of about 700,000 tons in production, and partly to the disposal of stocks in countries where they existed (see table 176).

Table 176. Sugar: Stocks at end of crop year

	Thousands of tons of raw sugar 1960/61	*Index: 1960/61=100*	
		1961/62	*1962/63*
Selected exporting countries			
Argentina	362.8	28.6	28.7
Brazil	619.3	106.6	53.2
Colombia	67.9	51.1	58.5
Dominican Republic	167.7	93.0	87.1
Mexico	163.7	60.2	74.6
Peru	65.3	133.5	115.2
Sub-total	1,446.7	78.8	56.5
Cuba	3,130.0	26.3	20.6
TOTAL	4,576.7	42.9	31.9
Final stocks in importing countries	10,043.2	67.2	42.2

SOURCE: F. Licht, *International Sugar Report*, 20 January 1964.

Table 177. Sugar: Exports from four Latin American countries, by destination[a]

(*Thousands of tons, raw value*)

Year	*Total*	*United States*	*Rest of world*	*United Kingdom*	*EEC*	*Other Western European countries*
1956	1,178	101	1,078	459	103	49
1957	1,766	187	1,578	610	234	145
1958	2,043	232	1,812	502	231	144
1959	1,934	282	1,652	469	197	153
1960	2,930	1,195	1,733	395	295	64
1961	2,702	1,794	908	238	12	34
1962	2,138	1,995	143	38	4	1

SOURCE: International Sugar Council, *Statistical Bulletin*, vol. 20, No. 1, January 1961, and op. cit.

[a] Brazil, Mexico, Peru and the Dominican Republic.

In 1961 sugar exports from this group of countries remained at a level similar to that of 1960, but fell in 1962 to 2.46 million tons, as the result of a contraction in exports from Argentina, Brazil, Mexico and Peru. They are estimated to have recovered to a certain extent in 1963, but do not appear to have regained the peak levels reached in earlier years.

Cuban sugar exports remained at a high level during the early part of the period under review, especially in the five years from 1954 to 1958, when they rose gradually but steadily from 4.2 to 5.6 million tons. In 1959 there was a break in the trend, and 700,000 tons less were exported, possibly because the harvest was late that year, and sales opportunities were lost. In 1960 exports regained the high level they had enjoyed in 1958, and in 1961 the unusually large output sent exports up to 6.4 million tons (see again table 175).

Despite the sharp reduction in the 1962 harvest, the liquidation of stocks made it possible to export 5.1 million tons that year, or 300,000 tons more than the actual output. Between 1962 and 1963 stocks were reduced by a million tons to slightly over 340,000, one of the lowest figures ever reached. The meagreness of the reserves, in conjunction with a greatly reduced harvest, resulted in exports of barely 3.3 million tons[9] in 1963.

The upshot was that Cuba's share of world exports decreased from 33 to 25 per cent between 1959 and 1962 and even more markedly in 1963. Similarly, its share of total Latin American sales diminished from 71 per cent in 1959 to 68 per cent in 1962, while it appears to have been about 53 per cent in 1963. The proportion of the world total represented by exports from the rest of Latin America, which in 1960 had been over 16 per cent, shrank to 12 per cent by 1962 (see again table 175).

(iii) *Changes in the direction of trade*

For the purpose of analysing the change in the flow of sugar exported by the other Latin American countries away from the world market in general and towards the United States, data are given in table 177 on exports from the four sugar-producing countries in Latin America that follow Cuba in order of importance: Brazil, Mexico, Peru and the Dominican Republic.[10]

Table 177 shows that the sugar exports of the four countries expanded steadily from 1.2 million to 1.9

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[9] Figures furnished by the Central Planning Board.

[10] Argentina has been omitted because of the irregular nature of its exports. The nine remaining countries have also been excluded to simplify the analysis, since their sugar exports always follow the same curve and their omission does not affect the results.

million tons between 1956 and 1959. From 1959 to 1960 they mounted to 2.9 million tons, but in 1961 and 1962 fell to 2.7 million and 2.1 million tons respectively.

In 1956 the exports of these four countries to the United States had been as little as 100,000 tons against sales of 1.1 million tons to the rest of the world, but in 1962 the trend was reversed, exports to the rest of the world dropping to about 143,000 tons, while those to the United States climbed to nearly 2 million. Sugar exports to Western Europe amounted to about 820,000 tons in 1959, but by 1962 were practically non-existent. However, the supply situation in the European markets remained satisfactory, largely thanks to excellent sugar beet harvests in the area, especially in 1961.

Table 178. Sugar: Cuban exports by destination

(*Thousands of tons, raw value*)

Year	*Total exports*	*United States*	*Centrally planned economies*	*World market*	*Western Europe*				*Western hemisphere*[a]	*Rest of the world*				
					Total	*United Kingdom*	*EEC*	*Other Western European countries*		*Total*	*Japan*	*Morocco*	*United Arab Republic*[b]	*Other countries*
1956 .	5,394	2,813	269	2,312	1,039	382	426	231	238	1,034	604	162	38	231
1957 .	5,275	2,753	387	2,135	1,196	424	653	118	177	764	460	189	21	94
1958 .	5,632	3,241	251	2,140	1,016	487	301	228	233	890	556	156	38	139
1959 .	4,951	2,937	274	1,740	857	358	437	62	170	715	349	201	29	135
1960 .	5,635	1,949	2,272	1,414	636	173	315	148	90	689	205	161	175	148
1961 .	6,414	—	4,825	1,589	335	79	76	180	189	1,064	423	157	150	333
1962 .	5,122	—	3,719	1,403	312	76	40	196	103	989	431	256	155	145

SOURCE: International Sugar Council, *Statistical Bulletin*, vols. 20 and 22, op. cit.

[a] Excluding the United States.

[b] 1956–59: Syria only; 1960–62: Syria and Egypt.

The changes in the sugar trade of the "rest of Latin America" were far-reaching, but those in Cuba's trade were even more fundamental. The data in table 178 show that in the four years between 1956 and 1959 Cuba invariably sent slightly over half its sugar exports to the United States, the proportion ranging from 52 per cent in 1956 to the exceptional figure of nearly 60 per cent in 1959.

In 1960, as a result of the amendment of the United States Sugar Act, Cuba exported one million tons less to the United States, but raised its sales to the countries with centrally planned economies (mainly the Soviet Union) to 2.27 million tons. In fact its exports to those countries were 2 million tons more than in 1959.[11] From 1961 on the United States market was completely closed to Cuban sugar. In the same year exports to the centrally planned economies were 4.83 million tons, but fell in 1962 to 3.72 million tons.

The expansion of Cuba's sugar exports to the Soviet Union and other countries with centrally planned economies was accompanied throughout by a decline in its exports to the world market. In 1956–58 the annual average sent to the world market was 2.2 million tons, but by 1962 it had fallen to 1.4 million. This decrease mainly reflected a reduction in the amounts exported to the United Kingdom and the European Economic Community (EEC) countries. Exports to the rest of Western Europe, which accounted for a smaller proportion of the total, seem to have remained fairly stable.

Cuban sugar exports to the Western hemisphere (excluding the United States) have not been substantial in recent years, and between 1956 and 1962 decreased from 240,000 to 100,000 tons.

In 1956 its exports to the rest of the world were slightly over a million tons; by 1960 this amount had been reduced by a third, but after 1961 the 1956 level was restored. The main importers in this group of countries were Morocco, Japan and the United Arab Republic. Morocco is a traditional importer of Cuban sugar, and Japan provided a fairly substantial market after the Second World War. The United Arab Republic as a whole began to buy Cuban sugar after 1960 (see again table 177).

(iv) *Prices*

The price of raw sugar on the world market, which had reached an average of 3.5 dollar cents a pound in 1958, began to decline early in 1959 and reached its lowest point (2.84 cents) in the third quarter of that year, subsequently reclimbing to 3 cents in the last quarter (see table 179).

During the first half of 1960 prices remained at 3 cents, which was less than the minimum of 3.25 dollar cents stipulated by the International Sugar Agreement below which the International Sugar Council could reduce the export quotas of the participating countries.[12] On 7 July 1960 the Instituto Cubano de Estabilización del Azúcar (ICEA) established a minimum sales price of 3.25 cents per pound. Nevertheless, prices began to fall from August onwards, and their downward trend was accentuated at the end of the year by the prospects of a substantial increase in world sugar production in 1961.

After Cuban sugar was barred from the United States market, no further transactions in futures were made under Contract No. 4 of the New York Coffee and Sugar Exchange (raw sugar, f.o.b. Cuban ports),[13] which had served to fix the basic contractual price of the International Sugar Agreement. In January 1961 Contract No. 4 was replaced by Contract No. 8, which provides for futures transactions in respect of sugar from Mexico, the Dominican Republic, Peru and other countries.

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[11] In 1956–59 the average amount exported annually to those countries by Cuba was 295,000 tons.

[12] This Agreement has been inoperative since 23 October 1961.

[13] For a more detailed account of the specifications of the sugar contracts referred to in the text, see footnotes a, b, and c in table 179.

Table 179. Raw sugar: International prices
(*Dollar cents per pound*)

Average	*United States*[a]	*United States*[b]	*World*[c]	*United States*[a]	*United States*[b]	*World*[c]
		1958			*1959*	
Quarterly						
I . .	5.27	5.61	3.57	5.13	5.49	3.14
II . .	5.39	5.76	3.45	5.27	5.68	2.88
III . .	5.46	5.81	3.48	5.53	5.89	2.84
IV . .	5.54	5.92	3.49	5.48	5.89	3.02
Annual . .	5.42	5.78	3.50	5.35	5.74	2.97
		1960			*1961*	
Quarterly						
I . .	5.05	5.50	3.01	...	6.32	2.99
II . .	5.22	5.67	3.02	...	6.40	3.23
III . .	5.57[d]	6.01	3.27	...	6.17	2.85
IV . .	5.56[d]	6.00	[e]	...	6.29	2.57
Annual . .	5.35	5.80	3.10[f]	...	6.30	2.91
		1962			*1963*	
Quarterly						
I . .	...	6.42	2.44	...	6.84	6.03
II . .	...	6.44	2.64	...	9.35[g]	9.29[h]
III . .	...	6.45	3.11	...	7.27	7.73
IV . .	...	6.50	3.74		9.24[i] 9.34[j]	10.24[i] 11.73[j]
Annual . .	...	6.45	2.98	...	8.09[k]	8.28[k]

SOURCE: United Nations, *Monthly Bulletin of Statistics*, various issues.

[a] Price f.a.s. Cuba, raw, 96°, bagged for export to the United States, based up to the end of 1960 on the spot price of Contract No. 6 of the New York Coffee and Sugar Exchange, after deduction of freight and insurance from Cuba.

[b] Price c.i.f. New York of raw imported sugar, 96°, in bulk, duty paid, based from the beginning of 1961 on Contract No. 7 of the New York Coffee and Sugar Exchange.

[c] Up to the end of 1960 price f.a.s. Cuba, raw, 96°, bagged for export to world, in accordance with Contract No. 4 of the New York Coffee and Sugar Exchange. Beginning 1961, spot price in accordance with Contract No. 8 of the New York Coffee and Sugar Exchange for raw sugar, 96°, f.o.b. stowed in ports in the Greater Antilles (and Brazil).

[d] Averages based on monthly quotations taken from the United States Department of Agriculture, *Sugar Reports*, No. 104, December 1960, p. 39.

[e] According to the United Nations, *Monthly Bulletin of Statistics*, transactions in this quarter were made below the minimum price of 3.25 dollar cents a pound.

[f] Nine-month average.

[g] The average quotation for May was 10.36 cents a pound.

[h] The average quotation for May was 11.11 cents a pound, and the maximum was 12.49 cents on 22 and 23 May.

[i] Average quotation for the month of October.

[j] Average quotation for the month of November.

[k] Eleven-month average.

In the second half of 1961 there was a slight recovery n the world price of sugar, which rose to 3.23 cents, but hereafter dropped steadily until the second half of 1962 owing to the boom in world sugar production. At the end of January 1962 the world price was 1.96 cents a pound, that is, the lowest in twenty years.

From the third quarter of 1962 onwards the world price of sugar began to make a steady and progressive recovery as a result of the drop of over 3 million tons in world production in 1962, which included a reduction of 2 million tons in Cuba and of 660,000 tons in Western Europe. The upward movement of world prices was ntensified in the first quarter of 1963, when the average level (6.03 cents) was 60 per cent higher than in the preceding quarter, and rose to its peak on 22 and 23 May when it was 12.49 cents a pound, as a result of the combined effect of further production cuts in Cuba (1 million tons) and in Eastern Europe (over 1.1 million tons) during 1963. This price is the highest quoted since 1920. The two post-war peaks, which were due to exceptional increases in demand as a result of the Korean conflict and the Suez crisis, respectively, were 8.05 cents a pound in June 1951 and 6.85 cents in April 1957. On 24 May 1963 prices began to fall, and in the third quarter of the year the level was 7.73 dollar cents, compared with 9.29 in the preceding quarter. However, owing to the hurricane which ravaged Cuba in October, prices began to rise again, and the average quotation in November was 11.73 cents a pound.

The price of sugar in the United States under Contract No. 7 (c.i.f. New York, raw sugar, in bulk, duty paid) rose more rapidly than the world price up to June 1963, and then fell behind as a result of the measures applied by the United States Secretary of Agriculture to ensure an adequate supply. Those measures included the suspension of production controls, the formalization of agreements to deliver the global quota of 1.36 million tons between 27 November 1962 and 5 April 1963, and the abolition of the variable import rate on 23 January 1963, when the world price was the same as the domestic price. On 24 May 1963 the United States authorities announced that the supplies of sugar available in the country or promised for delivery under the 1963 quotas already exceeded estimated consumption for the year, and from then on the price of sugar in the United States began to decline, reaching its lowest point in August, when the average price was 6.61 cents a pound. Nevertheless, the conditions prevailing in the world sugar markets caused the United States market price to move up again; in September the average was 7.21 cents a pound and in November 9.34 cents. These prices were, however, still below those on the world market (see again table 179).

(c) *Cacao*

Cacao beans are one of the commodities whose fluctuations in prices have not only been very frequent but also very wide (see table 180). In 1960 prices for this commodity fell, after the upward movement in 1957–58, and the downward trend of the market persisted until the end of 1962. This period of falling prices is probably the most severe and prolonged that the international cacao market has seen in the last eighteen years. The main causes of the depression were apparently the high level of world production since 1960–61, the accumulation of excess stocks due to the slow growth of consumption and also perhaps the successive postponements of the negotiations begun in 1958 for the conclusion of an international agreement on cacao. At the end of 1962 the market became firmer and prices rose rapidly by approximately 15 per cent compared with the levels attained during the previous months. This trend—which reflects an upsurge of demand in a number of consumer countries as can be seen from the figures in table 182—continued during the first half and the last quarter of 1963; only in the third quarter was there again a slight weakening of the market, despite which the average price in 1963 was higher than in the two preceding years, settling down at a level slightly lower than that of 1960.

It has been pointed out previously that world production maintained high levels during recent years. In fact, since 1960–61, when there was an increase of 14 per cent over the preceding year, world production showed only slight fluctuations upward or downward, but, as table 181 indicates, these high levels were attained by the African countries, whereas Brazil, the most important Latin American producer and exporter, showed throughout the period 1960–64 a substantial decline in output. As it accounts for over two thirds of Latin America's production, the increases in other countries—such as Colombia, Ecuador and Mexico—were not sufficient to compensate for the contraction in Brazil's output.

Consequently, the value of Latin America's total exports of cacao beans decreased considerably between 1960 and 1962, owing to the combined effects of a smaller volume of exports and lower prices. Practically the only exception was Mexico, which has recently been able to expand its production and thereby its exports, though much more in volume than in value owing to the fall in prices between 1960 and 1962 (see table 183). Data for 1963 are still far from complete. It has already been pointed out that the prices in that year were, on an average, higher than those of the two preceding years. Consequently there are prospects of an increase in export earnings, especially in Brazil, the Dominican Republic and Ecuador, where exports have improved somewhat in volume. Mexico's exports have continued to expand at a vigorous pace. In Costa Rica, Panama and Venezuela there was a slight contraction in the volume of exports in 1963, but it may have been offset by the rise in prices.

Table 180. Cacao: International prices[a]
(*Dollar cents per lb*)

Average	*Accra*	*Bahia*	*Accra*	*Bahia*
	1958		*1959*	
Quarterly				
I .	43.4	42.2	37.6	36.1
II .	46.4	45.4	37.3	37.2
III .	45.9	45.1	37.3	35.1
IV .	41.5	40.6	34.0	33.0
Annual .	44.3	43.3	36.6	35.4
	1960		*1961*	
Quarterly				
I .	28.6	27.9	21.9	22.2
II .	28.3	26.1	22.6	22.6
III .	28.6	26.8	21.3	21.0
IV .	27.8	26.1	24.6	23.8
Annual .	28.4	26.8	22.6	22.4
	1962		*1963*	
Quarterly				
I .	21.5	21.2	24.0	26.2
II .	21.1	20.9	26.4	27.3
III .	20.4	21.2	24.5	25.8
IV .	21.1	22.1	26.5	26.8
Annual .	21.0	21.3	25.4	26.5

SOURCE: United Nations, *Monthly Bulletin of Statistics*, various issues.

[a] Spot price, in bond, New York.

At the beginning of 1964 the international cacao market continued to be relatively weak, apparently because of the failure of the conference convened by the United Nations in October 1963 to draw up an international agreement on cacao. In spite of the long period of preliminary negotiations, the parties concerned were unable to agree on the scale of prices to be established in the agreement, and the conference was therefore brought to an end without having achieved its objective.

(d) *Coffee*

(i) *Production*

Since the maximum figure of 78 million bags recorded in 1960, world coffee production has tended to fall. In 1961 it dropped to 66 million bags, while in 1962 it was 72 million and in 1963 67 million. It is estimated that production will continue to decrease in 1964 and 1965 as a result of the disasters in Brazil (see table 184).

Latin America's production, which in 1962 was 77 per cent and in 1963 70 per cent of the world total, reached a maximum of 62.8 million bags in 1960 only to fall to 47.5 million bags in the following year; a partial recovery took place in 1962 when 55.2 million bags were produced, but the decline thereafter continued, only 46.4 million bags being obtained in 1963.

Table 181. Cacao beans: World and Latin American production

	Thousands of tons 1959/60	Index: 1959/60=100			
		1960/61	1961/62	1962/63	1963/64
World total . . .	1,019	114.3	110.8	113.8	112.1
Brazil	199	61.3	59.3	55.8	62.8
Colombia . . .	14	100.0	100.0	114.3	128.6
Costa Rica . . .	11	100.0	109.1	109.1	100.0
Dominican Republic .	39	89.7	89.7	97.4	97.4
Ecuador . . .	38	110.5	102.6	105.3	113.2
Mexico	15	106.7	140.0	173.3	186.7
Panama . . .	2	70.0	60.0	50.0	50.0
Venezuela . . .	13	92.3	92.3	100.0	100.0
TOTAL, EIGHT COUNTRIES	331	76.6	76.2	77.7	83.7

SOURCE: *World Agricultural Production and Trade*, op. cit., October 1963.

Table 182. Cacao beans: Use (milling) in selected countries

	Thousands of tons	Index: 1960=100.0		
		1961	1962	1963
Federal Republic of Germany . . .	108.8	108.2	116.7	118.8
France	52.4	115.5	124.0	125.4
Italy	28.0	128.6	131.2	...
Japan	9.3	152.1	226.1	...
Netherlands . . .	84.7	118.0	121.6	123.6
Switzerland . . .	11.3	96.3	115.3	...
United Kingdom . .	75.2	108.3	126.9	126.1
United States . . .	218.4	112.2	116.7	121.2
TOTAL	588.2	113.2	122.1	...

SOURCE: Gill & Duffus Ltd., *Cocoa Market Report*, London, 10 February 1964.

Brazilian coffee is of paramount importance in world production, since it represents over 40 per cent. The period in question was characterized by sharp falls in production from one year to the next, which were primarily responsible for the fluctuations in Latin America's total supply and probably in that of the world. Production in the rest of the Latin American countries was more stable, as is shown by the following figures (expressed in millions of bags):

	1959/60	1960/61	1961/62	1962/63
Brazil	44.0	29.0	35.0	27.0
Rest of America ..	18.8	18.5	20.2	19.4
TOTAL	62.8	47.5	55.2	46.4

In contrast to the decline in Latin America's output, African production increased by 1.8 million bags between 1961 and 1963, thereby increasing its share of the world total from 21 to 23 per cent. This figure is even more significant if it is recalled that in 1934–38 Africa's production represented only 6 per cent of the world total, in 1948–52, 13 per cent, and in 1956–57, 19 per cent.

Table 183. Cacao beans: Exports from Latin America

Country	Millions of dollars	Index: 1960=100	
	1960	1961	1962
	A. *Value*		
Brazil . . .	69.0	66.7	34.8
Costa Rica . .	5.9	81.4	78.0
Dominican Republic	20.9	70.3	58.4
Ecuador . .	21.4	72.9	73.4
Mexico . . .	1.5	146.6	293.3
Panama . .	0.8	62.5	62.5
Venezuela . .	9.1	84.6	106.6
TOTAL	128.6	71.2	55.3
	B. *Volume*		
Brazil . . .	100.0	82.6	44.6
Costa Rica . .	100.0	87.5	101.3
Dominican Republic	100.0	67.0	73.4
Ecuador . .	100.0	90.7	88.2
Mexico . . .	100.0	183.3	403.3
Panama . .	100.0	82.5	76.3
Venezuela . .	100.0	73.3	91.0

SOURCES: International Monetary Fund, *International Financial Statistics*; *Revista del Banco Central*, Venezuela; *Revista del Banco Nacional de Comercio Exterior*, Mexico.

Owing to overproduction of coffee in recent years, some Latin American countries have adopted policies designed to reduce their productive capacity. Thus, in October 1961, a plan was put into effect in Brazil, whereby 2,000 million coffee trees of low productivity were eliminated, and 500 million high-productivity trees were replanted on a rational basis. According to this plan, 2 million hectares of land would be freed for subsistence, industrial and export crops. Official figures indicate that 641 million coffee trees were eliminated between the inauguration of the plan and 30 September 1963. Similar steps were taken in Mexico, where it was announced at the beginning of 1962 that 20 per cent of the land then under coffee would be used for other crops.

Table 184. Green Coffee: Latin American and world production, 1959/60 to 1962/63 and estimates for 1963/64

(Thousands of 60-kg or 132. 276-lb bags)

Country or region	*1959/60*	*1960/61*	*1961/62*	*1962/63*	*1963/64*[a]
Brazil	44,000	29,000	35,000	27,000	26,000
Colombia	8,000	7,700	7,800	7,500	7,300
Mexico	2,025	2,100	2,350	2,200	2,900
Guatemala	1,600	1,500	1,700	1,875	1,810
El Salvador	1,575	1,450	1,900	1,650	1,675
Costa Rica	905	1,165	1,140	1,020	1,000
Cuba	850	700	800	650	475
Venezuela	750	825	750	850	950
Haiti	650	425	725	650	650
Dominican Republic	585	500	600	570	600
Ecuador	575	750	850	725	775
Peru	475	525	710	775	800
Nicaragua	375	485	440	485	450
Honduras	350	275	365	415	425
Panama	70	65	85	65	75
TOTAL	62,785	47,465	55,215	46,430	43,275
Others[b]	485	475	569	584	602
	63,270	47,940	55,784	47,014	46,087
Africa	11,842	13,838	12,883	15,629	15,469
Asia and Oceania	2,876	3,810	3,665	4,020	4,306
WORLD TOTAL	77,988	65,588	71,832	66,663	63,652
Latin American production/world total (percentage)	80.5	72.4	76.8	69.6	69.1
African production/world total (percentage)	15.2	21.1	17.2	23.4	23.5
Brazilian production/world total (percentage)	57.7	45.7	48.7	40.5	39.4

SOURCE: *World Agricultural Production and Trade*, op. cit., December 1963.

[a] Third estimate (December 1963) of the United States Department of Agriculture.

[b] Including Bolivia, French Guiana, Guadeloupe, Hawaii, Jamaica, Paraguay, Puerto Rico, Surinam, Trinidad and Tobago.

Thus, while some Latin American coffee-producing countries first restricted their exports and subsequently their production, and established reserves to avoid a disastrous drop in prices—all measures that benefited the African coffee producers[14]—African production, which had increased by 70 per cent between 1948–52 and 1956–57 as against 3 per cent for Latin America, expanded by a further 67 per cent compared with only 9 per cent in Latin America between 1957–58 and 1962–63.

This expansion of African production "could not have been achieved without energetic and efficient government support in the agricultural and economic field",[15] and was principally due to the entry into production of extensive new areas. The area planted with coffee was expanded in ten African countries[16] by at least 56 per cent between 1950 and 1956—from 628,000 to 969,000 hectares.

Other reasons for the extraordinary expansion of Africa's coffee production are the fact that many of these countries enjoy assured markets as a result of special agreements with their metropolitan countries; the increased consumption of soluble coffee in the high-income countries, leading to more demand for *robusta* coffees, which fetch lower prices, since quality is not an important factor in their elaboration; and the low production costs and high profit margins in Africa, which allow growers to expand production in spite of falling prices.

To look at the question from the standpoint of production for export, the increases in Africa led to much higher exportable surpluses, since "with a negligible mestic consumption, practically all coffee produced is annelled into export trade".[17]

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[14] FAO, "Coffee: Recent developments regarding stocks and trade", *Monthly Bulletin of Agricultural Economics and Statistics*, vol. 12, No. 3, March 1958, pp. 13–17.

[15] FAO, *Monthly Bulletin of Agricultural Economics and Statistics*, op. cit., p. 15.

[16] Angola, Belgian Congo, French Cameroons, French Equatorial Africa, Togo, French West Africa, Madagascar, Kenya, Uganda and Tanganyika.

By examining the figures in table 185 it can be seen that tin America's share in world production of exporta- e coffee declined from 80 per cent in 1959–60 to 67 r cent in 1962–63, while that of the African countries creased from 17 to 29 per cent during the same period.

Table 185. Green coffee: Latin American and world exportable production, 1959/60 to 1962/63 and estimates for 1963/64

(*Thousands of 60-kg or 132.276-lb bags*)

Country or region	*1959/60*	*1960/61*	*1961/62*	*1962/63*	*1963/64*[a]
Brazil	37,000	22,000	28,000	20,000	19,000
Colombia	7,200	7,000	6,800	6,500	6,300
Mexico	1,550	1,450	1,500	1,250	1,500
El Salvador	1,475	1,350	1,800	1,530	1,550
Guatemala	1,400	1,300	1,500	1,675	1,600
Costa Rica	825	1,050	1,025	900	880
Other Latin American countries	3,085	2,778	3,500	3,240	3,310
TOTAL	52,535	36,928	44,125	35,095	34,140
Others[b]	349	327	233	245	255
	52,884	37,255	44,358	35,340	34,395
Africa	11,454	13,314	11,842	15,066	14,906
Asia and Oceania	1,716	2,370	2,145	2,405	2,621
WORLD TOTAL	66,054	52,939	58,345	52,811	51,922
Latin American export production/world total (percentage)	79.5	69.8	75.6	66.5	65.8
African export production/world total (percentage)	17.3	25.1	20.3	28.5	28.7
Brazilian export production/world total (percentage)	56.0	41.6	47.9	37.8	36.6

SOURCE: As for table 184.

[a] Third estimate (December 1963) of the United States Department of Agriculture.

[b] Including Bolivia, French Guiana, Guadeloupe, Hawaii, Jamaica, Paraguay, Puerto Rico, Surinam, Trinidad and Tobago.

) *Exports*

In 1959 and 1960 world exports of coffee reached the ak level of 42.5 million bags. Between the same two ars, however, Latin American exports were 900,000 gs less, while African exports increased by 1.2 million gs (see table 186). In 1961 world exports continued to crease by 1.2 million bags, reaching a level of 43.7 llion. Latin American exports remained stationary, 30.3 million bags, while those of Africa expanded by 5,000 bags and those of Oceania by 675,000. The llowing year, world exports of coffee reached the un- ecedented figure of 46.3 million bags. Latin America creased its sales by almost 1.3 million, chiefly owing to rger exports from Colombia, Guatemala, Ecuador, aiti and the Dominican Republic, which more than mpensated for the reduction of 600,000 bags in Brazil's ports. During the same period, African exports were ain increased, by nearly 1.5 million bags.

According to the partial data available for 1963, it ems clear that world and Latin American exports con- ued to follow an upward course. Brazil played an extremely important role in this trend, with an increase of 1.7 million bags exported in the first eight months of the year over its volume for the same period in 1962. Similarly, between January and May 1963, Guatemala exported 300,000 bags more than during the same period in the previous year. On the other hand, during the first nine months of 1963, Colombia's exports were 500,000 bags less than in the same months in 1962, and those of El Salvador showed a reduction of 275,000 bags. At the same time, African exports showed an increase of only 40,000 bags (see again table 186).

World coffee stocks also underwent an unprecedented increase, from 2.43 million tons in 1959 to 4.39 million tons in 1962. Much of this enormous accumulation took place in Brazil, where stocks increased from 1.45 to 3.72 million tons during the period in question (see table 187).

(iii) *Prices*

Up to the end of 1963 the world market prices of *arabica* coffees fell continuously from the extraordinarily high levels attained in mid-1954.[18] Between 1954 and 1955 the price of Santos coffee dropped by 27 per cent, and between 1955 and 1958 it suffered a further fall of 13 per cent. This downward tendency became more pronounced during 1959, the price sinking 24 per cent below its 1958 level. However, the succession of steep plunges was arrested slightly in 1960, when the average price remained at 36.7 cents, only a few points below the average for the previous year.

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[17] FAO, *Monthly Bulletin of Agricultural Economics and Statistics*, . cit., p. 15.

[18] During July 1954 the price of Santos No. 4 (ex-dock New York) reached 88.3 cents per pound.

Table 186. Green coffee: Latin American and world exports, 1959–62, and selected months in 1959–60

(*Thousands of 60-kg or 132.276-lb bags*)

Country or region	*1959*	*1960*	*1961*	*1962*[a]	*Months*	*1962*	*1963*
Brazil . . .	17,723	16,819	16,971	16,376	I–VIII	10,181	11,862
Colombia . . .	6,413	5,938	5,651	6,562	I–IX	5,121	4,616
Costa Rica . . .	712	766	835	902		...	...
Cuba	52	90	85	139		...	...
Dominican Republic .	962	481	335	487		...	...
Ecuador . . .	397	522	381	551	I–IX	397	344
El Salvador . .	1,345	1,178	1,431	1,478	I–IX	1,592	1,318
Guatemala . . .	1,405	1,329	1,255	1,552	I–V	602	901
Haiti	364	394	348	514	I–IX	384	295
Honduras . . .	255	258	210	266		...	...
Mexico . . .	1,240	1,384	1,483	1,458	I–III	488	447
Nicaragua . . .	273	361	349	338		...	...
Panama . . .	16	21	5	27		...	...
Peru	331	440	567	624		...	...
Venezuela . . .	434	408	406	319	I–VII	210	246
TOTAL, LATIN AMERICA	31,322	30,389	30,312	31,593	I–IX	23,809[b]	25,080[b]
Africa . . .	9,499	10,699	11,334	12,793	I–IX	9,777	9,816
Asia and Oceania .	1,320	1,153	1,829	1,654		...	...
Others[c] . . .	253	250	250	250		...	...
WORLD TOTAL	42,394	42,491	43,725	46,290	I–IX	34,581[b]	36,221[b]
African exports/world total (percentage) .	22.4	25.4	25.9	27.6			
Brazilian exports/world total (percentage) .	41.8	39.6	38.8	35.4			
Latin American exports/world total (percentage) . . .	73.3	71.5	69.4	68.3			

SOURCE: Annual data: Pan American Coffee Board, *Annual Coffee Statistics*, Nos. 25 and 26. Monthly data: George Gordon Paton and Co., *Complete Coffee Coverage*, several issues.

[a] Estimate.

[b] These totals have been obtained separately and are not the sum of the individual country figures.

[c] Including Bolivia, French Guiana, Guadeloupe, Hawaii, Jamaica, Paraguay, Puerto Rico, Surinam and Trinidad and Tobago.

Table 187. Green Coffee: World stocks

(*Millions of tons*)

Year	*Brazil*	*Other countries*[a]	*Total for five countries*	*World total*[b]	*Brazil's stocks as a percentage of world total*
1958	0.87	0.30	1.17	1.64	53.0
1959	1.45	0.40	1.85	2.43	59.7
1960	2.83	0.59	3.42	3.76	75.3
1961	3.19	0.65	3.84	4.23	75.4
1962	3.72	0.63	4.35	4.39	84.7

SOURCE: *The State of Food and Agriculture, 1963*, op. cit., p. 29.

[a] Colombia, the Ivory Coast, Uganda and the United States, at 30 June each year.

[b] At 30 September each year.

From 1960 onwards the decline in the price of this type of coffee became less rapid, probably as a result of the continual decrease in world coffee production in that and subsequent years. The average price sank to 36 cents in 1961 and to 34 cents in 1962. In the first nine months of 1963, Santos No. 4 fell a further six points to 33.4 cents per pound (see table 188).

In general, the price evolution of coffees of the mild types, such as Manizales, has been similar to that of Brazilian coffees. From a maximum of 80 cents per poun in 1954, prices dropped continuously until they touche 52.3 cents four years later. Between 1958 and 1959 th average price of Manizales fell by 14 per cent, but, o reaching 44.9 cents in 1960, the fall was temporaril halted, and the price remained at a level similar to tha of the year before. In 1961 and 1962 the fall continue though it was by then less pronounced, prices declinin to 43.5 and 40.8 cents, respectively. In the first nin months of 1963 the average was 39.6 cents per pound.

Up to 1961 the trend followed by coffees of th *robusta* type was similar to that of *arabica*, which ha been described above. In fact, Ambriz coffee fro Angola, ex-dock New York, reached a maximum of 6 cents per pound in 1954, only to slump to 40.3 cents i 1958, 30.6 cents in 1959, and 25.3 cents in 1960, reachin its lowest point in 1961 with 19.9 cents per pound.

In 1962, however, the price of *robusta* coffees began t recover, ending the year with an average of 21.6 cent while *arabica* prices continued to move down slowl uring the first nine months of 1963 the average price f Ambriz coffee was 27.1 cents, or 36 per cent more an in 1959, whereas the prices of *arabica* coffees were out 10 per cent lower than in 1959.

As a result of the drought, fires and frosts in the rincipal coffee-producing areas of Brazil during the st months of 1963, and the expectation of reduced upplies from that country in 1964 and subsequent years, orld coffee prices improved greatly during these months. s proof of this, it may be pointed out that at the end of ecember 1963 the price quoted on the New York Coffee nd Sugar Exchange for Santos coffee (Contract B) for elivery in March 1964 reached 41.25 cents per pound, hereas the price for delivery in July was 43.25 cents per ound and for delivery in December nearly 45 cents per ound.

Table 188. Green coffee: International prices[a]

(*Dollar cents per pound*)

Average	*Santos No. 4*	*Manizales*	*Ambriz, Angola*	*Santos No. 4*	*Manizales*	*Ambriz, Angola*
		1958			*1959*	
Quarterly						
I . .	54.4	54.9	41.6	39.3	46.0	32.4
II . .	50.4	54.3	42.9	36.9	44.9	32.5
III . .	45.6	51.6	41.8	35.8	45.2	31.0
IV . .	43.2	48.6	34.7	35.9	44.7	26.4
Annual .	48.4	52.3	40.3	37.0	45.2	30.6
		1960			*1961*	
Quarterly						
I . .	36.8	45.6	26.3	37.0	43.9	20.5
II . .	37.1	44.8	26.4	37.2	43.6	19.5
III . .	36.2	44.9	24.6	35.8	43.4	19.5
IV . .	36.6	44.4	23.8	33.9	43.0	20.1
Annual .	36.7	44.9	25.3	36.0	43.5	19.9
		1962			*1963*	
Quarterly						
I . .	34.1	42.5	20.7	33.5	39.9	26.0
II . .	34.4	40.4	21.3	33.5	39.4	27.7
III . .	34.0	40.2	21.5	33.1	39.5	27.7
IV . .	33.3	39.9	22.8			
Annual .	34.0	40.8	21.6	33.4[b]	39.6[b]	27.1[b]

SOURCE: United Nations, *Monthly Bulletin of Statistics*, various issues.

[a] Import price, in bulk, of Santos No. 4, Manizales and Ambriz, Angola coffee, ex-dock, New York.

[b] Nine-month average.

v) *The 1962 International Coffee Agreement*

Since 1957 a number of partial agreements designed o regularize the coffee market have been in operation.[19] n 28 September 1962, under the auspices of the United Nations, approval was given to the International Coffee Agreement, which was signed by both exporting and importing countries and is still in force.

The principal objectives of this agreement, which will remain in force for five years, are to strike a reasonable balance between supply and demand, so as to assure consumers of adequate supplies of coffee, and producers of markets with fair prices; to mitigate the serious difficulties caused by unduly large stocks, and by excessive fluctuations in coffee prices prejudicial to the interests of both producers and consumers; to contribute to the development of productive resources and to the promotion and maintenance of employment and income in the member countries; to help to augment the purchasing power of the coffee-exporting countries by keeping prices at equitable levels; and to stimulate the consumption of coffee by all possible means.

The principal regulating mechanism of the Agreement is the allocation of basic export quotas, which amount at the outset to nearly 46 million 60-kg bags per coffee year (1 October to 30 September),[20] and are adjusted every three months to bring them into line with the market situation. These quotas are applied to coffee in all its forms, i.e., parchment, green, roasted, ground, decaffeinated, liquid and soluble. The Agreement does not set up any price-stabilizing machinery.

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[19] (*a*) Agreement of October 1957, signed by seven Latin merican countries;

(*b*) Agreement of September 1958, signed by fifteen Latin merican countries;

(*c*) Agreement of October 1959 (renewed in 1961 for a further ear), signed by fifteen Latin American countries, the European conomic Community (including the Cameroons) and Portugal.

[20] Of this total, 32.6 million bags, or 71.7 per cent, were allocated to Latin America, and 11.3 million, or 24.8 per cent, to Africa. See United Nations Coffee Conference, 1962, *Summary of Proceedings* (E/CONF. 42/8), New York, 1963, annex A, p. 70.

At its first session held in London in August 1963, the International Coffee Council established export quotas for the new coffee year beginning 1 October 1963 at 99 per cent of the basic quotas. At its second session in November, the Council considered a proposal to increase the annual quotas for 1963/64 from 99 to 101.25 per cen of the basic quotas, but decided against it[21] (see table 189

Table 189. Export quotas allocated under the International Coffee Agreement, 1963–64
(60-kg or 132.276-lb bags)

Country	*Basic export quotas, Oct. 1963–Sept. 1964*	*99 per cent of basic export quotas, Oct. 1963–Sept. 1964*	*Quarterly quotas Oct.–Dec. 1963*
Brazil	18,000,000	17,820.000	4,455,000
Colombia	6,011,280	5,951,167	1,487,792
Mexico	1,509,000	1,493,910	268,904
El Salvador	1,429,500	1,415,205	424,562
Guatemala	1,344,500	1,331,055	399,317
Costa Rica	950,000	940,500	188,100
Peru	580,000	577,200	172,260
Ecuador	552,000	546,480	163,944
Dominican Republic	510,000	504,900	151,470
Haiti	504,000	498,960	149,688
Venezuela	475,000	470,250	117,563
Nicaragua	419,100	414,909	41,491
Honduras	285,000	282,150	28,215
Cuba	200,000	198,000	39,600
Panama	26,000	25,740	6,435
Bolivia	20,000	20,000	5,000
TOTAL, Latin America	32,815,380	32,487,426	8,099,341
Trinidad and Tobago	44,000	43,560	4,356
TOTAL, American continent	32,859,380	32,530,986	8,103,697
Africa			
African and Malagasy Coffee Organization[a]	4,302,125	4,259,104	1,064,776
Portugal	2,188,648	2,166,762	595,860
Uganda	1,887,737	1,868,860	429,838
Ethiopia	1,020,000	1,009,800	131,274
Congo (Leopoldville)	950,000	940,500	188,100
Kenya	516,835	511,667	153,500
Tanganyika	435,458	431,103	129,331
Rwanda	415,000	410,850	41,085
Sierra Leone	65,000	64,350	6,435
Nigeria	18,000	18,000	4,500
TOTAL, Africa	11,798,803	11,680,996	2,744,699
Asia			
Indonesia	1,176,000	1,164,240	291,060
India	360,000	356,400	89,100
TOTAL, Asia	1,536,000	1,520,640	380,160
WORLD TOTAL	46,194,183	45,732,622	11,228,556

SOURCE: International Coffee Council.

[a] Set up by the Cameroons, the Congo (Brazzaville), the Ivory Coast, Dahomey, Gabon, the Central African Republic, Malagasy Republic and Togo.

The Agreement finally entered into force on 27 Decem ber 1963, after ratification by twenty exporting countri (Brazil, Burundi, the Cameroons, Colombia, Costa Ric Cuba, the Dominican Republic, El Salvador, Gabon Guatemala, the Ivory Coast, Madagascar, Mexico, Nigeri Panama, Peru, Rwanda, Tanganyika and Uganda), whic together represented 82.4 per cent of world exports i 1961, and by twelve importing countries (Argentina Australia, Austria, Canada, the Federal Republic o Germany, France, New Zealand, Norway, Spain Sweden, the United Kingdom and the United States which accounted for 80.6 per cent of world imports in 196

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[21] At a special session held on 12 February 1964, the International Coffee Council agreed to increase annual export quotas for the 1963/64 coffee year from 99 to 102.15 per cent of the basic quotas (from 45,732,622 to 47,172,044 bags) and to grant increments of 948,000 bags altogether in the quotas of seven countries for that year i.e. a total increase of 2,387,422 bags.

) *Prospects for 1964*

It is expected that the recent disasters in Brazil will duce its exportable coffee production in 1964 to some million bags—that is, 11 million bags less than in 63 and about 15 million below the average in recent ars—and that their effects will be felt for another three ars to come. As a result of this slump, Brazil's producon—which is normally about half the total for world offee exports—is expected to be less than world conmption in 1964, which has not been the case since 1952.

Table 190. Red meat: Exports from Latin America[a]
(*Thousands of tons*)

untry	*1956–59*	*1960*	*1961*	*1962*	*1963*
gentina	609	445	445	543	736[b]
azil	45	14	50	39	25[c]
exico	26	51	42	48	
raguay	12[d]	12	15	14	
uguay	47	69	51	69	75[c]
Total	739	591	602	713	

Source: *World Agricultural Production and Trade*, op. cit., August 63; FAO, *Monthly Bulletin of Agricultural Economics and Statistics*, l. 12; December 1963.

[a] Fresh, chilled, frozen, prepared and canned meat, in terms of rcass meat.

[b] *Economic Survey*, Buenos Aires, 28 January 1964.

[c] Projections of the United States Department of Agriculture, conned in *The 1964 World Agricultural Situation*, February 1964, pplement No. 1, table 7.

[d] 1959.

However, world coffee stocks stand at some 73 million gs at present, and are therefore enough to supply world mand for eighteen months. Over 80 per cent of these ocks are held in Brazil, which has a basic export quota 18 million bags under the International Coffee Agreeent, that is, 8 million more than the production envisged for 1964. It will thus be able in both this and cceeding years to dispose of a large proportion of its cumulated stocks.

In view of these circumstances and of the plans for iminating insufficiently productive coffee plants in veral countries, world coffee prices may very well nprove in the next two or three years.

(e) *Meat*[22]

Although the Latin American countries no longer count for the preponderant share of world meat ports they enjoyed before the Second World War, this em continues to represent an important source of reign exchange for them. In 1934–38 Latin America ntributed 41 per cent of total exports, but this proporon fell to only 17 per cent in 1953–54, to 27 per cent in 56–60 and to 22 per cent in 1960–62. The reduction the region's relative share in the world market is ainly attributable to the stagnation of Latin America's port production in earlier years and to larger contribuons from other parts of the world.

An analysis of the changes that have taken place in atin America in regard to exports over the last few years shows that since 1956 the volume of shipments has recovered substantially, save for the declines in 1960 and 1961 which, as may be seen from table 190, were due to a reduction in exports from Argentina. These increased considerably in 1962 and 1963, reaching unprecedented levels in the latter year and representing an income of over 300 million dollars for Argentina. Shipments from Uruguay also increased during these two years, thereby contributing to the over-all increment in Latin American exports.

It is not out of place to point out that the recent recovery of these exports coincided with the expansion of world trade in recent years. The market that expanded most rapidly was the United States, owing to the rise in *per capita* consumption. Most of the additional imports came from Australia and New Zealand and, to a lesser extent, from Mexico and Ireland. South America has played no part in this expansion (see table 191), first, because the United States does not import carcass meat from any country where there is foot-and-mouth disease, and, secondly, because the share of Argentina, Brazil, Paraguay and Uruguay, which consisted almost entirely of canned meat, even declined in relative terms since total imports of this type of meat did not increase in the same measure as chilled and frozen meat. In fact, United States purchases of canned meat were only 10 per cent more in 1962 than in 1960, whereas those of carcass meat doubled during the same period. Imports of cattle-on-the-hoof also increased over the last few years in relation to 1960, thereby benefiting Mexico and Canada; the appreciable drop which took place in 1963 had a less marked effect on Mexico's shipments in both absolute and relative terms.

As regards Latin America's share in the European import market, the United Kingdom's total imports of frozen meat, which had fallen well below their 1960 level in 1961 and 1962, recovered substantially in 1963 (see table 192), precisely in respect of Argentina and Uruguay where the contraction had occurred. On the other hand, its imports of canned meat were less in 1963 than in previous years, but, although still below the 1962 level, imports from Argentina were 17 per cent higher than in 1960. The United Kingdom continues to absorb at least half Latin America's frozen meat exports which consist mainly of beef, and about one third of its shipments of prepared and canned meat.

Other important markets for frozen meat from South America are Italy and the Federal Republic of Germany and, to a lesser degree, the Netherlands, Belgium, Spain, Greece and other European countries. In 1963 Argentina's exports increased not only to the United Kingdom, but also to the EEC countries, which have been stepping up intra-Community meat trade. By contrast, Uruguay's shipments to the Community have steadily declined.

Inter-Latin American meat trade is still negligible, since it does not account for more than 3 per cent of the total volume of Latin American exports. As regards the composition of meat exports by types, 80 per cent of the total volume consists of chilled and frozen meat, the principal exporters being Argentina and Uruguay, followed by Mexico, Brazil and the Central American countries. The remaining 20 per cent comprises prepared and canned meat, half from Argentina and the other half from Paraguay, Brazil and Uruguay. Mexico and

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[22] Including beef, mutton and pork.

Argentina are the chief exporters of cattle-on-the-hoof for consumption, followed by some of the Central American countries. With the exception of Mexico's sales to the United States, the bulk of the trade in cattle-on-the-hoof is carried out on an intra-regional basis.

Table 191. Beef and cattle-on-the-hoof: Imports into the United States, by country of origin

Product and exporter country	*Tons 1960*	*Index: 1960=100*		
		1961	*1962*	*1963*
A. BEEF				
1. *Chilled and frozen*				
Australia	63,670	155.5	315.0	332.0
Canada	8,751	148.1	100.2	93.1
Ireland	23,763	128.7	126.9	122.6
Mexico	17,408	135.5	152.6	165.0
New Zealand	58,824	113.7	160.0	170.2
Others	15,075	98.0	159.3	184.1
TOTAL	187,491	132.2	204.9	216.2
2. *Salted*				
Argentina	557	74.3	43.8	45.2
Brazil	87	125.3	100.0	—
Canada	100	28.0	51.0	—
Paraguay	22	—	—	—
Uruguay	—	[a]	—	—
Others	90	173.3	135.5	107.8
TOTAL	856	95.6	58.9	49.6
3. *Cooked*				
Argentina	2,448	154.4	180.3	183.8
Brazil	272	244.8	436.8	209.5
Paraguay	—	—	[b]	—
TOTAL	2,720	163.4	207.7	186.4
4. *Canned*				
Argentina	21,775	110.2	91.5	...
Brazil	3,911	147.6	153.2	...
Paraguay	4,021	105.8	96.6	...
Uruguay	4,400	139.6	171.7	...
Others	534	144.9	166.3	...
TOTAL	34,641	118.1	110.4	...
B. CATTLE-ON-THE-HOOF	*Thousands of head*			
Canada	273	183.1	182.4	81.1
Mexico	391	138.9	192.3	135.2
TOTAL	664	157.1	188.2	112.9

SOURCE: The Commonwealth Economic Committee, *Intelligence Bulletin*, London, March 1963 and January 1964.

[a] Exports of 111 tons.

[b] Exports of 48 tons.

No definite prognostications can be made about export prospects because it is impossible to assess the future effect of a great many of the factors that come into play. Certain possibilities must none the less be considered.

In view of the slow growth of world meat production and the shortage of meat on the international market, it is expected that the Latin American countries will continue to have access to the traditional export markets. Save in exceptional circumstances, it is highly unlikely that they will be able to achieve significant increments in the volume of exports, as production trends indicat that any increases in output are only just enough t supply the new demands created by rapid populatio growth. Obviously, if Argentina and Uruguay could within a short space of time, reduce the heavy pressur of beef demand by encouraging people to eat more pork and poultry, beef exports might expand considerably. Unquestionably the wide potential demand and the inflexible nature of meat supplies will continue to keep world meat prices at a high level.

Long-term export prospects are rather uncertain and in some ways, inclined to be unfavourable, because i must not be forgotten that the livestock policies followed by the European Common Market and the United Kingdom—the main purchasers of Latin America meat—are imed at boosting domestic production with an eye, *ter alia*, to import substitution. Not only is direct ction taken to stimulate production, but prior permits, uantitative restrictions, customs duties, and other easures have been adopted to discourage imports. In ecember 1963, the EEC Council of Ministers approved he basic principles of a common agricultural policy in espect of rice, beef, milk products and vegetable oils.[23] t is difficult to estimate the restrictive influence of such egulations on Latin America's exports, but there is no doubt that their effect will be unfavourable, since they nvolve the application of an *ad valorem* common external ariff of 20 per cent and a total quota of 20,000 tons for rozen meat imports. The fact is that the economic ntegration policy of the European countries constituting he Common Market may well become a serious obstacle o the expansion of Latin America's meat exports. The United Kingdom is trying to eradicate foot-and-mouth disease and, if it eventually succeeds in doing so, it will close its doors to frozen meat from countries where that disease still persists, including all the South American countries. The United States offers an increasingly wide market for frozen meat from abroad, but this applies only to countries not faced with the serious problem of foot-and-mouth disease.

able 192. Meat: Imports into the United Kingdom, by country of origin

roduct and exporter country	*Thousands of tons 1960*	*Index: 1960=100* *1961*	*1962*	*1963*
Beef:				
Argentina	183.6	77.5	88.3	128.5
Brazil	0.8	157.3	168.6	325.0
Uruguay	32.6	61.9	52.4	122.4
Sub-total	216.9	75.4	83.2	128.4
Australia	64.6	49.8	54.1	28.5
New Zealand	23.2	74.4	50.3	10.0
Ireland	14.7	223.7	146.3	110.0
Others	33.3	125.5	235.7	157.5
TOTAL	352.8	81.6	92.7	101.7
Mutton:				
Argentina	30.5	65.4	69.3	69.5
Chile	1.8	181.6	47.1	61.1
Uruguay	—	—	—	—
Australia	30.9	83.1	71.9	60.5
New Zealand	300.0	96.5	97.3	99.1
Others	12.0	69.3	134.2	120.8
TOTAL	375.3	92.4	93.9	94.0
Canned beef:				
Argentina	19.8	116.8	129.5	117.3
Brazil	4.1	100.9	49.5	19.5
Paraguay	4.7	115.1	134.5	82.0
Uruguay	3.3	54.0	102.0	83.0
Australia	19.0	80.8	53.6	31.7
New Zealand	0.8	112.7	118.9	31.5
Ireland	9.2	94.1	62.8	55.1
Others	16.4	142.1	150.5	125.0
TOTAL	77.3	106.9	102.1	85.8

SOURCE: *Intelligence Bulletin*, op. cit., March 1963 and January 1964.

It must be borne in mind, moreover, that several countries in Europe and Latin America are planning to make meat an important export item. The achievement of their objective, if coupled with the persistence of the factors and trends indicated in the preceding paragraph, would lead to fierce competition between the exporting countries.

The possibility of expanding inter-Latin American trade in meat is largely dependent upon the economic integration and trade agreements concluded by the ALALC countries. As things are now, a policy of self-sufficiency prevails, usually accompanied by import restrictions and a low level of purchasing power in large sectors of the population. It would therefore be unrealistic to expect a significant expansion in inter-Latin American meat trade before a change is brought about in these conditions.

(f) *Wool*

There were some divergent trends in the world wool market in 1960–63. Production and consumption remained relatively stable during that period with practically no growth (see tables 193 and 194), but prices fluctuated considerably, especially for heavy wools. The price behaviour of the two grades of wool shown in table 195 was not always similar to that of the other grades, and no general conclusions can therefore be drawn. However, the annual variations in the prices of these two grades give a general idea of the price trend of the wools exported by the two main Latin American producers. As shown in table 195, the prices of the two grades considered went down in 1961, but the decline was sharper for the fine wool from Uruguay than for the heavy wool from Argentina. However, in 1962, the situation changed considerably, and while the prices of the Argentine wool continued to decline, in Uruguay prices jumped to a higher level than in the two preceding years. This upward trend was strengthened in 1963, when the average price was 13 per cent higher than in 1962. In 1963 the prices of Argentine wool also made

Table 193. Wool: Production in selected countries and world total

Country	*Millions of pounds, greasy base 1959/60*	*Index: 1959–60=100* *1960/61*	*1961/62*	*1962/63*	*1963/64*[a]
Argentina	423	101.8	97.6	96.4	98.1
Australia	1,680	96.7	101.1	98.9	103.4
New Zealand	577	101.9	101.7	107.4	109.1
South Africa	319	99.3	105.6	100.6	105.0
Uruguay	159	113.8	116.3	119.4	119.4
WORLD TOTAL	5,625	99.6	101.5	101.0	102.9

SOURCE: Commonwealth Economic Committee, *Wool Intelligence*, London, Spetember 1963.

[a] Estimate.

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[23] See United States Department of Agriculture, "The EEC rounds out its common agricultural policies", *Foreign Agriculture*, 2 March 1964.

a good recovery (exceeding their 1962 level by nearly 21 per cent), but even so merely permitted a return to the levels for 1960.

Table 194. Wool: Consumption in selected countries

Country	Millions of pounds, clean scoured base 1960	Index: 1960=100 1961	1962	1963
United Kingdom	481	98.1	93.1	95.2
United States	419	100.2	103.8	100.2
Japan	302	115.8	105.9	110.9
France	301	100.0	96.6	99.7
Italy	198	69.1	103.5	99.0
Federal Republic of Germany	151	99.3	98.0	98.7
Belgium	86	95.3	116.2	110.5
Australia	74	87.8	98.6	106.7
Netherlands	22	95.4	100.0	104.5
Sweden	12	91.6	83.3	83.3
TOTAL	2,046	100.6	100.2	100.9
WORLD TOTAL	3,293	100.4	100.0	101.4

SOURCES: *Wool Intelligence*, op. cit., February 1964; United States Department of Agriculture, *The Wool Situation*, March 1964.

These differences in the behaviour of wool prices were undoubtedly due to changes in the consumption and/or supply of certain types or grades of wool. The price increases in 1963 were mainly in the second half of the year, that is, when the 1963/64 season began, and may reflect, on the one hand, a reactivation of demand in various importing countries, especially Japan, and, on the other, the more critical position into which stocks had been gradually but steadily declining since 1961, both in the exporting countries and in some of the main consumer countries.

Table 195. Washed wool: International prices

(*Dollars per pound*)

Average	Uruguay[a]	Argentina[b]	Uruguay[a]	Argentina[b]	Uruguay[a]	Argentina[b]
	1958		1959		1960	
Quarterly						
I	1.16	0.746	0.89	0.610	0.98	0.811
II	1.14	0.664	1.06	0.763	0.98	0.820
III	1.04	0.643	1.10	0.838	0.93	0.815
IV	0.90	0.598	0.99	0.767	0.90	0.765
Annual	1.06	0.663	1.01	0.745	0.95	0.803
	1961		1962		1963	
Quarterly						
I	0.82	0.765	0.91	0.719	1.05	0.739
II	0.88	0.765	0.99	0.694	1.06	0.772
III	0.90	0.765	1.00	0.625	1.07	0.847
IV	0.90	0.765	1.00	0.641	1.22	0.900
Annual	0.88	0.765	0.98	0.670	1.10	0.814

SOURCE: FAO, *Monthly Bulletin of Agricultural Economics and Statistics*, various issues.

[a] Montevideo super O's (58/50's), in bond, Boston.

[b] Buenos Aires 5/6's (40/36's), in bond, Boston.

Table 196. Wool: Exports from Argentina and Uruguay, by destination

Importing country	Millions of pounds 1959/60	Index: 1959/60=100 1960/61	1961/62	1962/63
A. *Argentina:*				
European Economic Community	103	140.7	115.5	112.6
United Kingdom	49	114.2	116.3	104.0
Other countries in Western Europe	4	350.0	225.0	350.0
Countries with centrally planned economies	27	88.8	88.0	62.9
United States	69	82.6	94.1	120.2
Other countries	28	157.1	114.2	163.5
TOTAL	280	121.4	109.2	115.7
B. *Uruguay:*				
European Economic Community	21	233.3	161.9	109.5
United Kingdom	17	300.0	170.5	200.0
Other countries in Western Europe	3	466.7	66.7	166.7
Countries with centrally planned economies	6	83.3	200.0	150.0
United States	13	169.2	146.1	138.4
Other countries	5	180.0	240.0	340.0
TOTAL	65	230.7	166.1	163.0

SOURCE: As for table 184.

The behaviour of exports in the main Latin American producer countries is shown in table 196. The high levels attained by Argentine and Uruguayan exports in 1960/61, partly through the use of stocks from earlier years, could not be maintained, because production contracted slightly in Argentina, and the increase that took place in Uruguay was negligible. Even so, the two countries' exports were substantially higher in 1962/63 than in

Table 197. Wool tops: Exports from selected countries

Exporting country	*Millions of pounds 1960*	*Index: 1960=100*		
		1961	*1962*	*1963*[a]
Argentina	2.1	104.8	233.3	452.4
Australia	19.2	102.6	102.1	133.3
Belgium	17.9	107.3	119.6	108.9
Federal Republic of Germany	2.9	131.0	127.5	103.4
France	57.6	93.9	92.7	90.8
Japan	6.1	134.4	275.4	165.6
South Africa	8.9	95.5	102.2	102.2
Switzerland	0.7	128.6	142.8	142.8
United Kingdom	91.1	101.1	85.8	105.4
Uruguay	21.3	119.7	110.8	126.7
TOTAL	227.8	102.8	101.7	111.0

SOURCE: *The Wool Situation*, op. cit., March 1964.

[a] Estimate.

1959/60. In both stocks on 1 October 1963 (when the 1963/64 trade year began) were the lowest since 1960. In both, too, exports of wool tops continued to expand (see table 197), especially in Argentina, where this type of export was not of significant proportions until very recently.

(g) *Wheat*

(i) *Production*

Between 1959/60 and 1962/63 Latin American wheat production declined by 2 per cent, from 9.4 to 9.2 million tons. During the same period world production (excluding mainland China) rose by 7 per cent, from 219 million to 235 million tons (see table 198). Generally speaking, the drop in Latin American output can be attributed to a severe reduction in the region's wheat-growing area, which the slight increase in average yield per hectare registered in most of the producer countries was unable to offset (see tables 199 and 200).

In 1962/63 seven countries were responsible for virtually all Latin America's wheat production. Foremost

Table 198. Wheat: World production

(*Thousands of tons*)

Region or country	*Average 1954/55 to 1958/59*	*1948/59*	*1959/60*	*1960/61*	*1961/62*	*1962/63*	*1963/64*[a]	*Percentage 1962/63*
Latin America	10,591	10,601	9,442	7,893[b]	8,953[b]	9,228[b]	10,580[c]	3.9
Argentina[d]	6,514	6,720	5,837	3,960	5,100	5,020	6,500	
Mexico[d]	1,129	1,337	1,266	1,190	1,402	1,433	1,780	
North America	41,117	49,899	42,610	51,026	41,317	45,127	50,523	19.2
United States[d]	29,064	39,782	30,512	36,939	33,604	29,735	30,835	
Canada[d]	12,053	10,117	12,098	14,087	7,713	15,392	19,688	
Western Europe[e]	37,073	39,062	42,644	39,585	37,658	47,595	41,104	20.3
EEC	22,796	24,370	25,890	24,201	23,176	29,656	23,800	(12.6)
Belgium and Luxembourg[f]	741	832	859	838	782	887	799	
Federal Republic of Germany[f]	3,479	3,720	4,522	4,965	4,038	4,591	4,856	
France[d]	9,459	9,601	11,544	11,014	9,573	14,054	9,509	
Italy[d]	8,747	9,815	8,471	6,794	8,301	9,521	8,110	
Netherlands[f]	370	402	494	590	482	603	526	
Spain[d]	4,480	4,550	4,630	3,517	3,438	4,812	4,800	
Sweden[d]	799	598	836	824	812	872	660	
Eastern Europe	11,462	11,854	13,940	12,933	13,554	13,630	12,500[c]	5.8
Soviet Union[g]	58,360	76,570	69,101	64,299	66,500	70,778	55,000[c]	30.2
Oceania	4,521	6,020	5,639	7,699	6,940	8,603	8,300[c]	3.7
Australia[d]	4,415	5,855	5,402	7,449	6,727	8,352	8,000	
Asia[h]	27,648	28,040	30,240	30,870	31,230	34,400	31,700[c]	14.6
Africa	5,590	5,380	5,170	5,590	4,170	5,820	6,200[c]	2.5
WORLD TOTAL[h]	196,054	227,426	218,786	219,895	210,322	235,181	215,934[c]	100.0
Mainland China	24,740	28,950	31,294	...	...	...	...	
WORLD TOTAL[i]	220,794	256,376	250,080	...	...	...	...	

SOURCES: 1954/55–1958/59 and 1958/59: International Wheat Council, *World Wheat Statistics, 1962*, London, 1962; 1959/60 and 1960/61: *ibid.*, 1963, London, 1963; 1961/62–1963/64: International Wheat Council, *Review of the World Wheat Situation 1962/63*, London, November 1963.

[a] Estimate.

[b] IBGE—Conselho Nacional de Estatística, *Anuário Estatístico do Brasil 1963*, Rio de Janeiro.

[c] International Wheat Council estimates, *Review of the World Wheat Situation 1962/63*, appendix III, table on p. 101.

[d] Exporting country, member of the International Wheat Agreement of 1959.

[e] Including Yugoslavia.

[f] Importing country, member of the International Wheat Agreement of 1959.

[g] Exporting country, member of the International Wheat Agreement of 1962.

[h] Excluding mainland China.

[i] Including mainland China.

Table 199. Wheat: Latin American production

(*Thousands of tons*)

Country	*1954/55–1958/59*	*1958/59*	*1959/60*	*1960/61*	*1961/62*	*1962/63*	*1963/64*[a]
Argentina	6,514	6,720	5,837	3,960	5,100	5,020	6,500
Mexico	1,129	1,337	1,266	1,190	1,402	1,433	1,780
Chile	1,110	1,178	1,116	1,123	1,072	1,268	1,100
Brazil	845	589	611	713[b]	545[b]	680[b]	...
Uruguay	654	400	183	413	375	452	490
Peru	141	156	161	154	154	157	150
Colombia	136	127	140	145	145	162	125
TOTAL, Latin America	10,591	10,601	9,442	7,893	8,953	9,228	10,580
WORLD TOTAL	196,054	227,426	218,786	219,895	210,322	235,181	215,934
Latin American production/world total (percentage)	5.4	4.7	4.3	3.6	4.3	3.9	4.9

SOURCES: 1954/55–1958/59: *World Wheat Statistics, 1962*, op. cit.; 1959/60 and 1960/61: *ibid.*, 1963, London, 1963; 1961/62–1963/64: *Review of the World Wheat Situation 1962/63*, op. cit.

[a] Provisional International Wheat Council estimate.

[b] *Anuario Estatístico do Brasil 1963*, op. cit.

Table 200. Wheat: Latin American wheat-growing area and yield

Country	*Average 1954/55 to 1958/59*	*1959/60*	*1960/61*	*1961/62*	*1962/63*	*1963/64*[a]
	Area (Thousands of hectares)					
Argentina	4,911	4,378	3,599	4,198	3,481	4,200
Brazil	1,244	1,186	1,141	1,022	743[b]	...
Mexico	858	946	840	816	736	830
Chile	806	884	837	849	843	854[c]
Uruguay	711	293	523	438	400	353
Peru	154	158	154	153	158	150
Colombia	163	160	166	160	165	...
Sub-total	8,847	8,005	7,260	7,636	6,526	...
Rest of Latin America	160	129	140	140	...	...
TOTAL, Latin America	8,988	8,134	7,400	7,776	6,676[d]	...
	Yield (Quintals per hectare)					
Chile	13.7	12.6	13.4	12.6	15.0	...
Mexico	13.1	13.4	14.2	17.2	19.5	21.4
Argentina	13.2	13.3	11.0	12.1	14.5	15.5
Uruguay	9.6	6.2	7.9	8.6	11.3	...
Peru	9.5	10.2	10.0	10.1	9.9	10.0
Colombia	8.7	8.7	8.7	9.1	9.8	...
Brazil	8.1	5.2	6.3[c]	5.3[c]	9.2[c]	...
Average	8.3	9.9	9.8	10.3	12.7	...

SOURCES: 1954/55–1958/59, 1959/60 and 1960/61: *World Wheat Statistics, 1963*, op. cit.; 1962/63: *Review of the World Wheat Situation 1962/63*, op. cit.

[a] Estimate.

[b] *Anuario Estatístico do Brasil 1963*, op. cit.

[c] Chile, Ministry of Agriculture.

[d] ECLA estimate.

among them were Argentina, Mexico and Chile, followed in order of importance by Uruguay, Brazil, Peru and Colombia.

The intense drought which affected most of the wheat-growing areas of Argentina in 1962/63 caused that country's wheat output to drop by 600,000 tons, compared with the 1959/60 level. The rise in yield during that period from 13.2 quintals to 15.5 quintals per hectare was not enough to compensate for the unusual reduction in area from 5.2 million hectares to only 3.4 million (see again table 200).

Mexico was able to increase its wheat output by 170,000 tons, or 13 per cent, between 1959/60 and 1962/63, notwithstanding a reduction in area of over 200,000 hectares. During the same period yields rose steadily to unusually high levels, mounting from 13.4 quintals per hectare to 19.5 quintals, thanks to improved techniques and to an expansion of the area under irrigation.

Between 1959/60 and 1961/62 wheat production in Chile remained at an annual average of 1.1 million tons, climbing to nearly 1.3 million tons in 1962/63, the highest figure ever registered in that country. This achievement was due to a marked increase in yield from 12.6 quintals per hectare in 1961/62 to 15 quintals in 1962/63.

Uruguay, which used to be Latin America's other wheat exporter, has seen its output decrease during the past few years to a point barely sufficient for domestic requirements. Since 1954/55, when it reached a peak of 850,000 tons, the trend has been consistently downward, and by 1962/63 the country's production had been reduced to 450,000 tons. This falling-off is largely due to a reduction in the wheat-growing area, which decreased from 523,000 hectares to 353,000 in the past three years, although there was a fairly substantial increase in yield.

Wheat production in Brazil gradually and steadily dropped between 1955/56 and 1959/60, falling from the high figure of 1.1 million tons to 610,000 tons in the last year of the period covered. Between 1959/60 and 1962/63 production levelled off at an average of slightly over 600,000 tons a year, which is 60 per cent of the maximum quoted above.

The drop in Brazil's wheat production is largely due to the substantial and progressive reduction in area which, from an average of 1.24 million hectares between 1954/55 and 1958/59, declined to 743,000 hectares in 1962/63. Yields were also lower, although they made a good recovery in 1962/63 when they reached the figure of 9 quintals per hectare.

(ii) *World and Latin American trade*

In the 1962/63 wheat year, world exports of wheat and wheat flour dropped to 43 million tons as a result of the increase in wheat production in many importing areas and, more particularly, in Western Europe. This was 4 million tons less than the record figure registered in 1961/62. Thus, for the first time since 1957/58, there was a reversal of the trend towards increased world trade in these commodities. Nevertheless, the amount exceeded the average for 1956/57 to 1960/61 by 6 million tons.

Wheat and wheat flour exports were less in Argentina, Australia, Canada, the Soviet Union and the United States, considerably higher in France, and remained at low levels in Sweden and Italy (see table 201).

Imports by Western European countries, particularly the EEC members, Spain and the United Kingdom, were much lower, as were those of Asia Minor, while Far Eastern imports climbed steeply. Both India and Pakistan purchased increasing quantities of wheat from the United States, subsidized by Public Law 480, while mainland China became the world's largest wheat importer when it purchased 5 million tons on credit.

Table 201. Wheat and wheat flour: World exports
(*Millions of tons of wheat equivalent*)

Exporting country	*1959/60*	*1960/61*	*1961/62*	*1962/63*[a]	*Percentage 1962/63*
United States of America	14.0	18.0	19.5	17.4	40.5
Canada	7.6	9.4	9.9	9.0	20.9
Australia	3.3	5.0	6.3	4.8	11.2
Soviet Union	4.9	3.7	4.7	4.7	10.9
France	1.7	1.5	1.8	3.1	7.2
Argentina	2.1	1.9	2.4	1.8	4.2
Federal Republic of Germany	0.8	0.8	1.2	0.6	1.4
Sweden	0.1	0.2	0.2	0.2	0.5
Italy	0.4	—	—	0.2	0.5
Other countries	1.3	0.9	1.0	1.3	3.0
TOTAL	36.0	41.4	47.0	43.0	100.0

SOURCE: *Review of the World Wheat Situation*, op. cit., various issues.

[a] Estimate.

Subsidized and deferred payment sales of wheat and wheat flour, which occupy an increasing share of the world wheat trade, rose still further. The International Wheat Council points out that transactions of this type in Australia, Canada, France and the United States rose to a combined total of 19.3 million tons in 1962/63, i.e. 700,000 tons more than in 1961/62.

(iii) *Latin American exports*

Only three Latin American countries—Argentina, Uruguay and Mexico—are self-sufficient in wheat, the other seventeen being net importers.

At present the only exporter is Argentina, although its sales have been decreasing during the past few years. From an annual average of 2.9 million tons in the four-year period 1954/55–1957/58, Argentina's exports fell to 1.9 million tons in 1960/61. In 1961/62 they edged up to 2.4 million tons but fell again to 1.8 million tons in 1962/63. Of its total exports in 1962/63, 860,000 tons went to Western Europe, particularly the EEC countries and the United Kingdom (see table 202).

Latin America constituted the second largest market for Argentine wheat in 1962/63, when it imported 800,000 tons, of which 472,000 tons went to Brazil. This is less than the volume shipped to that country in earlier years. For instance, in 1954/55–1957/58 Brazil annually imported an average of 900,000 tons from Argentina, rising to as much as 1.4 million tons in 1958/59, or 1 million more than in 1962/63. Peru is Latin America's other major importer of Argentine wheat; in 1962/63 it imported 290,000 tons, or twice as much as in 1954/55–1957/58.

Table 202. Wheat and wheat flour: Exports from Argentina, by country of destination
(*Thousands of tons of wheat equivalent*)

Country of destination	*Average 1954/55 to 1957/58*	*1958/59*	*1959/60*	*1960/61*	*1961/62*	*1962/63*[a]	*Percentage 1962/63*
Latin America							
Brazil . . .	897.5	1,433.0	910.5	684.4	551.3	472.2	26.1
Peru	139.5	80.3	145.9	192.9	185.0	288.8	16.0
Venezuela . . .	—	—	5.1	7.4	20.8	20.0	1.1
Paraguay . . .	40.8	55.8	75.8	80.2	23.6	19.3	1.1
Chile	163.0	—	50.0	125.1	—	—	—
Bolivia . . .	0.8	16.5	—	10.8	12.1	—	—
Uruguay . . .	—	—	10.9	—	—	—	—
TOTAL	1,241.6	1,585.6	1,198.2	1,100.8	792.8	800.3	44.3
Western Europe							
Italy	307.1	13.1	66.0	185.3	53.0	176.4	9.8
Netherlands . .	171.6	156.2	104.5	60.0	239.6	148.9	8.2
France . . .	72.5	58.4	79.5	—	124.8	85.6	4.7
Belgium and Luxembourg	104.0	63.9	31.6	27.5	38.5	69.8	3.9
Federal Republic of Germany . .	352.0	302.3	274.2	122.0	571.9	51.9	2.9
EEC sub-total	1,007.2	593.9	555.8	394.8	1,027.8	532.6	29.5
United Kingdom .	292.0	483.1	270.2	221.4	355.1	282.3	15.6
Rest of Western Europe	158.2	48.6	55.3	135.2	37.1	46.3	2.6
TOTAL	1,457.4	1,125.6	881.3	751.4	1,420.0	861.2	47.7
Eastern Europe . .	81.9	—	—	—	10.4	—	—
Asia							
Mainland China . .	50.9	—	—	—	88.2	98.0	5.4
Japan . . .	2.9	—	—	—	0.7	—	—
Lebanon . . .	0.4	7.9	29.5	46.1	—	—	—
TOTAL	54.2	7.9	29.5	46.1	88.9	98.0	5.4
Africa	23.7	41.5	—	10.4	40.1	46.6	2.6
Other countries, not specified	12.2	—	—	—	—	—	—
WORLD TOTAL[b]	2,871.0	2,760.6	2,109.0	1,908.7	2,352.2	1,806.1	100.0

SOURCES: 1958/59–1961/62: FAO, *World Grain Trade Statistics 1958/59–1961/62*, Rome, 1960, 1961 and 1962, pp. 24 and 25; 1962/63: *World Agricultural Production and Trade*, op. cit., January 1964, pp. 16 and 17.

[a] Estimate.

[b] There are slight discrepancies here which, however, do not invalidate the comparative analysis of total exports in this table and in table 203, as the figures in the latter were subsequently brought up to date.

(iv) *Latin American imports*

Latin America's imports of wheat and wheat flour have increased by over a million tons in the past five years (from 3.46 million tons in 1958/59 to 4.53 million tons in 1962/63).

Included among the chief importers were Brazil, Peru, Venezuela, Cuba and Chile. In 1962/63 these five countries imported 3.78 million tons of wheat, or 84 per cent of the regional total, while the fourteen remaining countries imported only 752,000 tons. Brazil bought 2.14 million tons, or 47 per cent of the regional total (see table 203).

The United States, which exported 2.5 million tons, was Latin America's main wheat and wheat flour supplier. Its exports went to every country in the region except Argentina and Cuba, but chiefly to Chile, Venezuela, Peru, Bolivia and Colombia (see table 204). The second place fell to the Soviet Union, which exported 551,000 tons of wheat and wheat flour to Cuba and 263,000 tons to Brazil. As indicated earlier, Argentina was the third major exporter, shipping 800,000 tons to other Latin American countries and thus securing 18 per cent of the regional market. Canada exported

356,000 tons of wheat to twelve Latin American countries, this figure representing 8 per cent of the region's total imports. Lastly, Australia and France exported 27,000 tons and 22,000 tons respectively, meeting 1 per cent of Latin America's import demand.

As a result of the lack of balance between Latin America's wheat production and consumption, with declining exports and rising imports, the area's wheat deficit more than quintupled between 1958/59 and 1962/63 (see again table 203).

Table 203. Wheat and wheat flour: Inter-Latin American trade

(*Thousands of tons of wheat equivalent*)

	1958/59	*1959/60*	*1960/61*	*1961/62*	*1962/63*[a]
Exports					
Argentina	2,804.4	2,144.0	1,945.8	2,353.2	1,806.1
Uruguay	163.6	20.0	—	0.4	1.1
TOTAL	2,968·0	2,164·0	1,945·8	2,353·6	1,807·2
Imports					
Brazil	2,047.4	1,744.3	2,011.3	2,282.9	2,142.4
Cuba	220.0	256.0[b]	223.0[b]	388.6	551.0
Peru	319.8	335.8	389.1	390.0	449.2
Venezuela	270.2	321.3	294.9	425.0	363.9
Chile	61.3	178.7	59.3	255.0	275.5
Sub-total	(2,918.7)	(2,866.1)	(2,977.6)	(3,741.5)	(3,782.0)
Bolivia	30.0	70.0	110.0	120.0	136.8
Colombia	129.6	93.3	147.1	155.0	122.3
Paraguay	70.0	85.0	95.0	90.0[b]	63.2
Guatemala	59.1	57.1	48.8	60.0[b]	60.3
Dominican Republic	35.6	49.4	30.9	55.0[b]	58.9
Costa Rica	46.1	46.6	49.0	55.0	57.8
Ecuador	40.7	39.1	51.7	43.0[b]	49.5
El Salvador	34.9	35.0	42.0	36.0[b]	43.2
Haiti	30.0	45.0	30.0	64.0[b]	40.0
Mexico	1.0	0.1	4.1	20.0	35.8
Panama	27.8	29.9	30.6	30.0	35.0
Nicaragua	20.0	20.0	20.0	20.0	24.7
Honduras	20.2	20.0	22.0	25.2	24.5
Uruguay	0.5	316.7	—	1.0[b]	0.7
TOTAL	3,464.2	3,773.3	3,658.8	4,515.7	4,534.7
Wheat deficit	−496.2	−1,609.3	−1,713.0	−2,162.1	−2,727.5

SOURCES: 1958/59: FAO, *World Grain Trade Statistics 1960/61*, Rome, 1961, p. 14; 1959/60 to 1961/62: op. cit., 1961/62, Rome, 1962, p. 14; 1962/63: exports: United States Department of Agriculture, *Wheat Situation*, WS-186, October 1963, p. 26; 1962/63: imports: *World Agricultural Production and Trade*, op. cit., pp. 16 and 17.

[a] Estimate.

[b] *World Wheat Statistics, 1963*, op. cit.

Table 204. Wheat and wheat flour: Latin American imports, by origin, 1962/63

(*Thousands of tons of wheat equivalent*)

Country of origin	*Volume*[a]	*Percentage*
United States	2,507.3	55.3
Soviet Union	814.0	17.9
Argentina	800.3	17.6
Canada	356.2	7.9
Australia	26.5	0.6
France	22.1	0.5
Other countries	8.3	0.2
TOTAL	4,534.7	100.0

SOURCE: *World Agricultural Production and Trade*, op. cit., pp. 16 and 17.

[a] Estimate.

(v) *Sales subsidized under Public Law 480*

A substantial part of the wheat exported by the United States to Latin America was shipped as sales subsidized by the Government in accordance with Public Law 480 and similar programmes, such as Section 402 of Act 665 (Mutual Assistance Act) and Section 416 of the Rural Act of 1949. Unfortunately, full data on the extent of these operations are not available. Some idea may nevertheless be obtained from the partial figures on the basis of which table 205 was prepared.

Subsidized sales of United States wheat to Latin America increased from 1.3 million tons to 1.6 million between 1959/60 and 1962/63, although their share of total United States exports to the region shaded from 66 per cent to 63 per cent. Brazil was the chief buyer in this category, its purchases under special terms rising from 900,000 tons in 1959/60 to nearly 1.27 million tons in 1962/63, i.e., an increase of some 370,000 tons. As may be seen from tables 205 and 206, Brazil's purchases on special terms represented some 90 per cent of its total purchases from the United States, except in 1957/58 when they dropped to 52 per cent.

Table 205. Wheat and wheat flour: Subsidized and commercial sales by the United States to Brazil and Latin America

(*Thousands of tons of wheat equivalent*)

	1959/60		*1962/63*	
	Thousands of tons	*Percentage*	*Thousands of tons*	*Percentage*
Latin America				
Subsidized sales . .	1,255	65.8	1,572	62.7
Commercial sales . .	652	34.2	935	37.3
TOTAL	1,907	100.0	2,507	100.0
Brazil				
Subsidized sales . .	895	95.4	1,266	90.0
Commercial sales . .	43	4.6	141	10.0
TOTAL	938	100.0	1,407	100.0
Brazil/Latin America[a]	*Percentage*			
Subsidized sales . .	71.3		80.5	
Commercial sales . .	6.6		15.1	
TOTAL	49.2		56.1	

SOURCES: 1959/60, subsidized sales: *Review of the World Wheat Situation*, op. cit., November 1960, p. 15; 1962/63, subsidized sales: *Wheat Situation*, op. cit.; 1959/60 and 1962/63, total sales: *World Grain Trade Statistics*, op. cit., various issues.

[a] Brazil's share of total United States' subsidized and commercial sales to Latin America.

Table 206. Wheat: Brazilian imports from the United States and total imports

(*Thousands of tons*)

Years	*United States exports*			*Total imports*	*Percentage*		
	Subsidized	*Commercial*	*Total*		*(1):(3)*	*(1):(4)*	*(3):(4)*
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*
1955/56 .	432.7	49.9	482.6	1,699.5	89.7	25.5	28.4
1956/57 .	379.0	—	379.0	1,553.1	100.0	24.4	24.4
1957/58 .	155.6	144.3	299.0	1,253.4	52.0	12.4	23.9
1958/59 .	422.6	52.9	475.5	2,047.4	88.9	20.6	23.2
1959/60 .	894.8	43.0	937.8	1,774.3	95.4	50.4	52.9
1960/61 .	949.7	120.1	1,069.8	2,011.3	88.8	47.2	53.2
1961/62 .	1,400.2	31.8	1,432.0	2,282.9	97.8	61.3	62.7
1962/63 .	1,266.5[a]	140.7[a]	1,407.2	2,140.0	90.0	59.2	65.8

SOURCE: United States Department of Agriculture, *Operation of the Public Law 480 Program in Brazil*, ERS–Foreign–59, Washington, November1963.

[a] Subsidized sales under Public Law 480 and similar programmes such as the Mutual Assistance Act and the Agricultural Act of 1949.

(vi) *The International Wheat Agreement, 1962*

Convened by the Secretary-General of the United Nations, representatives of forty-eight countries met at Geneva from 31 January to 10 March 1962 and drew up the International Wheat Agreement, 1962, which is essentially the same as the 1959 Agreement. The new Agreement will remain in force for three years—from 1 August 1962 to 31 July 1965—and, like its predecessors, will inject a measure of stability into international wheat prices. Once again Canadian wheat—No. 1 Manitoba northern wheat—was adopted as a frame of reference, its minimum price being upped from 1.50 to 1.62½ dollar cents per bushel and its ceiling price from 1.90 to 2.02½ cents per bushel.[24] At the same time, the principle that commercial purchases of wheat flour should be made at prices consistent with the wheat prices specified in the Agreement, in default of a statement to the contrary, constitutes a new and significant element for wheat-importing countries. Lastly, by recognizing the principle that excess wheat supplies should be effectively used to raise levels of consumption and to promote general economic and market development in developing countries with low *per capita* income levels, the Conference endorsed the view that the aims of the Agreement and of the new article 24 should reflect its concern for the problems of developing countries.

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[24] A bushel of wheat equals 0.027216 metric tons. A metric ton equals 36.744 bushels.

As the Soviet Union has acceded to the Agreement as an exporting country, the Agreement now includes all the major export sources of wheat in the world.[25]

Table 207. Wheat: International prices

(*Pounds sterling per long ton*)

Average	*1958*		*1959*		*1960*		*1961*		*1962*		*1963*	
	I	*II*	*I*	*II*	*I*	*II*	*I*	*II*	*I*	*II*	*I*	*II*
Quarterly												
I	24.9	[a]	24.4	24.3	24.5	24.3	25.4	24.9	25.8	25.9	24.6	24.9
II	24.9	25.5	23.8	24.0	24.4	24.3	25.1	24.7	26.2	26.0	[a]	24.6
III	25.3	25.5	24.5[b]	23.6	25.1[b]	24.2	26.7[c]	24.8	26.1	25.8	25.4[d]	25.0
IV	24.4	24.9	24.9[e]	24.0	25.0[e]	24.3	26.6	25.5	25.1	25.2	28.4	27.7
Annual	24.9	25.3[f]	24.4[g]	24.0	24.8[g]	24.3	26.0[g]	25.0	25.8	25.7	26.1[h]	25.6

SOURCE: United Nations, *Monthly Bulletin of Statistics*, various issues.
I—London, up-river, c.i.f. price Argentine wheat.
II—London, c.i.f. price Australian wheat.

[a] No quotations in this quarter.

[b] Quotations for July and August only.

[c] Quotations for September only.

[d] Quotations for August and September only.

[e] Quotations for November and December only.

[f] Nine-month average.

[g] Ten-month average.

[h] Eight-month average.

(vii) *Prices*

As will be seen from table 207, London prices for Argentine wheat remained fairly stable between 1958 and the middle of 1963, oscillating only slightly above or below the average. In the second half of 1961 the pressure of import demand and reduced supplies in exporting countries sent prices up for most types of wheat. By mid-1962, the majority of import qualities were priced slightly higher than in the same month in 1961.

With another large wheat crop expected in 1963, export prices started to decline in August of that year. However, the situation changed abruptly in September in view of the substantial purchases made by the Soviet Union from the United States, Australia and Canada and, to a lesser extent, from other suppliers. As a result, the London average monthly price for Argentine wheat in the last quarter of 1963 was nearly 12 per cent higher than in the final quarter of 1962, reaching 28.4 pounds sterling per long ton.

(viii) *Prospects*

World production of wheat in 1963/64 (excluding mainland China) is estimated at some 216 million tons, or 19 million tons less than the particularly high figure for 1962/63. Adverse weather conditions in many producing areas have reduced yields and affected the quality of the crop, conditions which did not exist in 1962/63.

According to the International Wheat Council's preliminary estimates, Argentina's 1963/64 crop will amount to 6.5 million tons, with any major increase in exports depending on the volume of the crop. It is considered unlikely that in the present wheat year exports will exceed 2.5 million tons, which would be an increase of 1.7 million tons over the 1962/63 export figure, but would nevertheless still fall short of the 1958/59 figure by 300,000 tons.

Table 208. Wheat situation: Projections for Latin America up to 1970

(*Thousands of tons*)

	Average 1957–59		*1970*			
			Hypothesis I		*Hypothesis II*	
Production		10.1		12.5		12.4
Consumption						
Seed and other .	0.9		0.9		1.0	
Food .	10.0		14.3		14.2	
Feed .	0.4	11.3	0.5	15.7	0.5	16.7
Deficit		−1.2		−3.2		−4.3

SOURCE: FAO, *Agricultural Commodities—Projections for 1970*, Rome, 1962, p. A-54.

More recent estimates from official Argentine sources place the crop at 7.1 million tons. A total of 3.68 million tons of wheat were authorized for export during the commercial year beginning 1 December 1963 and ending

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[25] Contracting parties to the International Wheat Agreement of 1959:

Exporting countries: Argentina, Australia, Canada, France, Italy, Mexico, Spain, United States.

Importing countries: Austria, Belgium and Luxembourg, Costa Rica, Cuba, Dominican Republic, Federal Republic of Germany, Federation of Rhodesia and Nyasaland, Guatemala, Haiti, Honduras, Iceland, India, Indonesia, Ireland, Israel, Japan, Korea, Netherlands, New Zealand, Nigeria, Norway, Panama, Peru, Philippines, Portugal, Saudi Arabia, Sierra Leone, Union of South Africa, United Arab Republic, United Kingdom, Vatican City, Venezuela.

Contracting parties to the International Wheat Agreement of 1962:

Exporting countries: as for the 1959 Agreement, plus the Soviet Union.

Importing countries: as for the 1959 Agreement, plus Finland, Liberia, Libya, Tunisia and Western Samoa, but minus Guatemala, Haiti, Honduras and Panama.

30 November 1964. Of this amount, 350,000 tons went to mainland China and 1 million tons to Brazil under existing commitments. This left a balance of 2.3 million tons for export to other countries, not including estimated exports of 450,000 tons of wheat flour, which is not subject to special authorization.

Recent information from Mexico indicates that the wheat crop for 1963/64 amounts to 1.9 million tons, the highest figure in that country's history and 36 per cent over the level in the two previous years.[26]

The increase in the Mexican crop, and that expected for Argentina, means that Latin America's total crop for 1963/64 may well be about 11.6 million tons, or 1 million tons more than the average for the five-year period 1954/55–1958/59 (see again table 199). But, even if this figure is reached, Latin America's share of the world total will still be only 5 per cent, which is virtually what it was then.

Over the longer term FAO has made projections[27] of Latin America's wheat position up to 1970, and these are hardly optimistic, as may be seen from table 208. In fact, a deficit of between 3.2 million and 4.3 million tons for the region as a whole is expected by 1970, based on a 24-per-cent increase in average production for the period 1957–59 and a consumption increment of between 39 and 48 per cent, based on the two hypotheses of income growth postulated in the study.

The foreign exchange drain which would result from a deficit of this size is serious enough to warrant careful consideration of how Latin America's wheat supply can best be expanded over the short term with a view to increasing regional self-sufficiency and trade.

B. MINERAL PRODUCTS

(a) *Copper*

During 1962 and 1963 copper prices remained completely stable in the two markets where most world transactions take place: New York and London. On the New York market this stability was in general a reflection of the price policy adopted by the major United States producers; in London, where as a rule the quotations of the London Metal Exchange fluctuate in accordance with short-term market prospects, the principal African copper producers adopted a policy similar to that of the United States producers. The price stability during the last two years was also made possible by the graded restrictions which some of the great world producers applied to production, although these restrictions did not represent any absolute reduction of output, but rather an expansion in line with consumption needs.

Table 209. Copper: Mining production in selected countries and world total

Producer country	*Thousands of long tons 1960*	*Index: 1960=100*		
		1961	*1962*	*1963*[a]
Bolivia	2.2	90.9	109.1	109.1
Chile	523.7	102.9	110.1	110.8
Haiti	0.9	377.8	466.7	488.9
Mexico	60.2	80.6	77.0	91.3
Nicaragua	4.8	129.2	145.8	137.5
Peru	189.7	99.0	82.1	89.6
Sub-total	781.5	100.8	101.8	104.0
Canada	392.2	99.9	106.0	102.0
Northern Rhodesia	567.3	99.7	97.5	100.2
Republic of the Congo	297.5	97.7	98.2	98.1
United States	964.4	107.9	113.7	110.7
Centrally planned economies	613.9	111.8	115.0	115.7
WORLD TOTAL	4,180.1	103.4	106.4	107.7

SOURCES: British Bureau of Non-Ferrous Metal Statistics, *World Non-Ferrous Metal Statistics*, November 1963; Mexico, Nacional Financiera, S.A.

[a] Estimates based on figures for nine or ten months.

In fact, as shown by the figures in table 209, world production in 1963 was higher than in 1962 by slightly less than 1 per cent. Between 1960 and 1962 world production increased by 6 per cent, whereas world consumption expanded by 8 per cent.[28] The rising growth rate of consumption was maintained in the major countries during 1963.

In the last three years the growth rate of copper production in Latin America has lagged behind that of total world production, mainly because output in Peru was lower in 1962 and 1963 than in the two previous years. In 1961–63 Mexico's output was much less than in 1960, partly owing to the working of lower-grade ores. In Chile, on the other hand, production has been expanding, although in 1963 the increase was very slight, in accordance with the major producers' policy of keeping the market relatively stable.

As regards world trade in copper, table 210 shows that there have been no significant fluctuations recently, a fact which is in keeping with the price trend. However, changes have taken place in Latin American exports commensurate to those in production, that is, Chilean exports have gone up while Peru's and Mexico's sales have declined.

During the first few months of 1964 copper demand became more intense and New York and London quotations rose considerably. It cannot yet be established whether this development reflects a substantive change in market prospects or is simply due to circumstantial factors. Stocks of refined copper in the United States and the other large consumer countries at the end of

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[26] As a result, surpluses have been available for export, although high production costs make it difficult for Mexican wheat to compete on the external market.

[27] FAO, *Agricultural Commodities—Projections for 1970*, Rome, 1962, p. A-54.

[28] According to the figures in *World Non-Ferrous Metal Statistics* (published by the British Bureau of Non-Ferrous Metal Statistics in Birmingham), world consumption of refined copper amounted to 4.644 million long tons in 1960 and 5.014 million in 1962.

1963 were sufficient to meet normal requirements, and no shortage is envisaged. The slight rise at the beginning of 1964 can consequently be regarded as part of a revival in prices after several years of low levels.

Table 210. Non-manufactured copper: Exports and imports of selected countries

	Thousands of tons 1960	*Index: 1960=100*		
		1961	*1962*	*1963*[a]
A. *Exports*				
Chile	512.8	105.6	109.7	111.5
Mexico	36.9	66.4	79.9	73.2
Peru	160.0	109.8	91.9	96.4
Canada	303.1	89.1	98.8	93.9
Northern Rhodesia	563.3	97.2	94.2	100.3
Republic of the Congo	299.1	98.3	98.8	...
United States	448.6	93.8	70.6	63.7
TOTAL	2,323.8	97.9	93.9	...
B. *Imports*				
Belgium	274.5	101.0	111.7	105.6
Federal Republic of Germany	430.3	108.9	93.4	93.0
France	206.6	107.8	109.7	101.2
Italy	193.2	102.5	124.2	113.9
Netherlands	32.1	93.5	67.0	81.9
United Kingdom	556.5	96.3	96.2	89.7
United States	475.7	87.3	91.3	102.0
TOTAL	2,168.9	99.0	99.9	98.4

SOURCE: *World Non-Ferrous Metal Statistics*, op. cit.

[a] Estimate.

(b) *Tin*

At the beginning of the period under review the world tin market was recovering from the sharp crisis it went through during 1958 and 1959, when it became necessary for the International Tin Council to make use of the instruments for market intervention that were provided under the International Tin Agreement, namely, tin purchases and sales for the Buffer Stock and the application of quantitative restrictions to member countries' exports. During the first half of 1960 the regulation of exports continued, although the quarterly quotas had already been fixed at so high a level that certain countries were not in a position to supply them. Moreover, the evolution of prices and the level of the reserves held by the Buffer Stock were such that the export restrictions could be eliminated, as in fact they were at the end of June 1960, in accordance with the provisions of the International Tin Agreement.

The evolution of the world tin market since 1960 has been characterized by sharp and extensive price fluctuations, superimposed on a slightly rising trend, which has mainly been due to the fact that production has been lagging behind consumption in recent years. The annual price average for 1960 declined slightly to the lower third of the price scale established by the International Tin Council, and consequently this was a period when the Buffer Stock did not intervene in the market.[29] But the reserves held by the Buffer Stock, which were maintained at 10,030 long tons throughout 1960, were speedily sold during the second half of 1961, and as a result prices rose steadily for the rest of that year. At the end of 1961, however, the market began to be affected by the decision of the United States Government to sell part of its strategic tin reserves, which heralded the beginning of a series of sharp price fluctuations that were a feature of the market throughout 1962 and 1963. This situation can be partly ascribed to the fact that the announcement made by the United States Government that it would sell part of its reserves was not followed by a rapid decision on the total amount to be put up for sale; Congressional authorization for the sales was delayed for several months, and this introduced an element of uncertainty and instability into the market. When it was finally announced officially in August 1962 that the total amount of tin to be sold from the United States strategic reserves would amount to 3,000 tons by the end of that year, prices began to fluctuate less and, during the second half of 1962, were lower than in the first half. The annual average for 1962 was nevertheless slightly higher than for the preceding year.

The total amount of tin that Congress authorized to be sold from the United States strategic reserves was 50,000 tons. However, the amount actually put up for sale between September and December of 1962 was only 200 tons a week (a total of 3,000 tons), in order to soften the possible impact of such sales on price levels. Clearly this aim was not wholly achieved, since, as already indicated, there was a decline in prices during the second half of 1962. This occurred despite the fact that the Buffer Stock intervened in the market, and during the period in question effected purchases of tin amounting to 3,270 tons by the end of December 1962.

The volume of tin withdrawn from the United States strategic reserves was confined to 200 tons a week during the first half of 1963, when tin prices improved somewhat, although without recovering the level reached during the first part of 1962. But the upward trend continued during the second part of 1963, when 1962 levels were surpassed, despite the fact that the Buffer Stock sold the tin it had bought at the end of 1962, and that, on two occasions, there was an increase in the volume of weekly sales of tin from the United States strategic reserves, first to 400 tons a week as of 21 June 1963 and then to 600 tons a week from the middle of December 1963. In the end, the annual average price for 1963 was about 2 per cent higher than for 1962.

Between 1960 and 1963 world output of tin concentrates increased by about 5 per cent, but was far below the levels attained in 1954–57. Tin consumption, on the other hand, which averaged 143,000 long tons in 1954–57,

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[29] During 1960–63 the price scale was twice amended. The three ranges into which the scale is divided are:

	Pounds sterling per long ton		
	Up to December 1961	*January 1962 to 4 December 1963*	*From 5 December 1963 on*
Lower range	730–780	790–850	850–900
Intermediate range	780–830	850–910	900–950
Upper range	830–880	910–965	950–1,000

rose to an average of 160,000 tons a year in 1960–62. This imbalance between production and current consumption was thus the principal factor in the evolution of prices over the last three years. The variations in the production of individual countries during this period were of short-lived significance only (see table 211). Even where the 1963 level of production was appreciably higher than in the three preceding years, the figures continued to be low in comparison with those for certain years prior to 1960.

Table 211. Tin: Production of concentrates (fine content)

Country	Long tons 1960	Index: 1960=100		
		1961	1962	1963[a]
Bolivia	19,407	106.4	112.3	114.6
Indonesia	22,596	82.1	76.6	57.5
Malaysia	51,979	107.7	112.7	116.0
Nigeria	7,675	101.3	106.9	113.7
Republic of the Congo	8,900	73.8	80.7	80.8
Thailand	12,081	109.8	121.5	129.0
WORLD TOTAL[b]	135,500	100.6	104.4	104.7

SOURCE: International Tin Council, *Statistics Bulletin*.

[a] Estimate.

[b] Excluding the countries with centrally planned economies.

As regards trade in tin, in the form of concentrates and metal, tables 212 and 213 show that important changes took place. One was the gradual revival of Bolivian exports which, however, in common with production, failed to regain in 1963 the levels they had attained in the early fifties. Another important development was the substantial reduction in the Soviet Union's exports from 21,900 long tons in 1958 to 11,300 in 1960, and to practically nil in 1962. Lastly, it will be noted that in the last two years the composition of tin exports has tended to change, less being exported in the form of concentrates, and more in the form of metal from the producer countries. In this respect there was a complete transformation in the composition of exports from Nigeria between 1961 and 1962.

Table 213. Tin: Imports of concentrates and metal

Country	Long tons 1960	Index: 1960=100		
		1961	1962	1963[a]
A. *Concentrates*				
Belgium	7,386	97.7	99.7	84.8
Malaysia	21,512	88.4	111.5	93.7
Netherlands	6,137	49.7	90.1	89.6
United Kingdom	24,816	89.6	70.2	65.2
United States	14,026	63.5	38.2	20.7
TOTAL	73,877	81.9	80.8	69.2
B. *Metal*				
Denmark	2,663	137.1	19.0	20.7
Federal Republic of Germany	28,046	94.5	39.5	38.2
France	11,676	86.0	95.9	94.1
Italy	4,647	104.8	101.3	105.4
United Kingdom	2,905	62.1	317.8	272.8
United States	39,488	101.0	104.9	110.5
TOTAL	91,596	97.1	88.1	89.7

SOURCE: *Statistics Bulletin*, op. cit.

[a] Estimate.

Table 212. Tin: Exports of concentrates (fine content) and metal

Country	Long tons 1960	Index: 1960=100		
		1961	1962	1963[a]
A. *Concentrates*				
Bolivia	18,338	100.2	106.1	119.9
Indonesia	24,867	67.5	67.1	50.2
Nigeria	7,860	98.4	3.2	1.3
Republic of the Congo	5,976	...	...	...
Thailand	12,618	103.9	112.8	122.0
B. *Metal*				
Belgium	7,981	55.1	85.2	74.9
Indonesia	1,765	101.8	...	...
Malaysia	76,366	102.1	106.5	112.7
Netherlands	12,234	70.1	33.9	33.9
Nigeria	—	b	b	b
Republic of the Congo	2,422	...	...	...
Soviet Union	11,318	49.5	4.3	...
United Kingdom	7,771	126.7	92.1	108.8

SOURCE: *Statistics Bulletin*, op. cit.

[a] Estimate.

[b] 1961: 600 tons; 1962: 7,542 tons: 1963: 8,500 tons.

(c) *Petroleum*

The prices of Venezuelan crude petroleum for export have remained unchanged since 1960, according to the lists published by the Venezuelan producer companies. However, during 1960 and 1961, the stability of Venezuelan petroleum prices was somewhat fictitious, since producers adopted the practice of allowing discounts on posted prices in order to maintain their competitive position on the market in the face of the price reduction effected in mid-1960 by the Middle Eastern producers. Moreover, the petroleum market went through a difficult period in 1960. The price reduction agreed upon by the Middle Eastern producers in 1960 had been preceded by a reduction in 1959, when stocks had become unduly large. However, in 1962 and 1963, consumption of petroleum products entered upon a phase of steady expansion, and the problems connected with the policy of sales at a discount thereupon virtually disappeared. Another factor contributing to their elimination was the joint action taken by the member Governments of the Organization of Petroleum Exporting Countries (OPEC),[30] which opened negotiations with the producer companies in the countries concerned in order to restore petroleum prices to the levels existing before August 1960, that is, before the second price reduction adopted by the Middle Eastern producers. However, their aim was not achieved.

Table 214. Crude petroleum: Production in selected countries and world total

Country or region	*Thousands of tons 1960*	*Index: 1960=100*		
		1961	*1962*	*1963*[a]
Argentina	9.1	132.9	153.8	151.6
Bolivia	0.4	100.0	100.0	100.0
Brazil	3.9	115.3	110.2	128.2
Chile	0.9	133.3	166.6	200.0
Colombia	7.8	96.1	93.5	106.4
Ecuador	0.4	100.0	75.0	75.0
Mexico	14.1	107.0	111.3	116.6
Peru	2.5	104.0	112.0	120.0
Venezuela	148.8	102.2	112.4	114.0
TOTAL, Latin America	187.9	104.3	113.8	116.4
United States	347.1	101.8	103.9	107.6
Canada	25.8	115.1	127.5	139.1
Far East	265.0	107.2	117.9	129.7
Soviet Union	147.9	112.3	125.7	138.6
WORLD TOTAL	1,052.0	106.4	115.4	124.0

SOURCES: *Petroleum Press Service*, London, January 1964; Mexico, PEMEX.

[a] Estimate.

Table 215. Crude petroleum and petroleum products: Exports from Latin American countries

	Absolute figures	*Index: 1960=100*		
		1961	*1962*	*1963*[a]
	Millions of barrels			
Venezuela				
Crude petroleum	730.8	101.7	110.9	112.0
Petroleum products	251.6	105.3	115.7	118.0
TOTAL	982.4	102.6	112.1	112.5
Colombia	31.3	87.9	77.6	97.4
	Thousands of tons			
Mexico	2,256	133.1	185.1	...
Peru	786	87.1	79.2	...

SOURCES: Banco Central de Venezuela, *Boletín Mensual; Boletín Mensual de Estadística*, Bogota, Colombia; *Revista de Comercio Exterior de México; Boletín del Banco Central de Reserva del Perú.*

[a] Estimate.

Table 216. Crude petroleum and petroleum products: United States imports

	Millions of barrels 1960	*Index: 1960=100*		
		1961	*1962*	*1963*
A. *Imports*				
Crude petroleum	371.6	102.7	110.6	111.0
Petroleum products	295.5	108.7	119.0	121.9
TOTAL	664.1	105.3	114.3	115.8
B. *Origin of imports of crude*				
Colombia	14.8	67.6	58.1	56.0
Mexico	0.9	400.0	400.0	406.3
Venezuela	172.9	90.1	97.7	100.9
Latin America[a]	188.6	90.8	96.8	100.0
Canada	41.3	161.3	206.3	218.9
Middle East	113.2	105.2	95.9	91.2
Others	28.5	86.3	121.7	107.1
TOTAL	371.6	102.7	110.6	111.0
C. *Percentage of total*				
Latin America	50.8	44.9	44.4	45.3
(Venezuela)	(46.5)	(40.8)	(41.1)	(42.0)
Canada	11.1	17.5	20.7	21.5

SOURCES: American Petroleum Institute, *Annual Statistical Bulletin*, April 1963, and *Monthly Statistical Bulletin*, December 1963.

[a] The total for Latin America includes 1.8 million, 1.3 million and 2.0 million barrels imported from Brazil in 1961, 1962 and 1963, respectively.

World production of crude expanded steadily during 1960–63, although the rates of increase differ appreciably from one country to another. Expansion was relatively rapid in the Soviet Union, which since 1961 has replaced Venezuela as the second largest producer of crude petroleum, in the Middle Eastern countries (see table 214), and in the new producer areas in North Africa. In the United States and Venezuela, on the other hand, expansion was slower.

In the other Latin American countries, production continued to increase in the strongly deficit areas, such as Brazil and Chile, and, up to 1962, in Argentina as well. In 1963 there was a slight reduction in output in Argentina, partly because of problems arising out of the revision of the contracts under which some of the producing companies were operating. In countries which have traditionally had small exportable surpluses (Colombia, Mexico and Peru) increases of varying sizes took place, but it should be noted that in Colombia there was an increase in 1963 only, whereas in the two preceding years output failed to expand.

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[30] Indonesia, Iraq, Iran, Kuwait, Libya, Qatar, Saudi Arabia and Venezuela.

The changes in exports were, on the whole, similar to those in production. Venezuela's exports were slightly higher in 1963 than in 1962, but the level in 1962 represented an increase of nearly 10 per cent over 1961 (see table 215). In accordance with the trend noted in earlier years, the growth rate of sales of petroleum products in 1960–63 was higher than that of crude petroleum sales. Colombia's exports, which were reduced in 1961 and 1962 by a decline in output, recovered to some extent in 1963, when new wells went into production, but remained below 1960 levels because domestic consumption absorbed a larger share of the output. In Mexico, there was a marked expansion of exports in 1961 and 1962, when they were freed from the quantitative restrictions applied to imports into the United States. Lastly, Peruvian exports declined sharply in both years, apparently because the requirements of domestic consumption outstripped production. The downward trend seems to have continued in 1963.

Table 217. Lead and zinc: Mining production

	Thousands of tons 1960	*Index: 1960=100*		
		1961	*1962*	*1963*[a]
A. *Lead*				
Argentina	27.4	105.5	96.3	96.3
Bolivia	21.4	94.8	86.9	96.7
Mexico	192.0	94.0	100.7	99.0
Peru	131.6	99.0	113.1	108.0
Sub-total	372.4	99.8	100.6	97.9
Australia	306.2	87.1	120.4	132.5
Canada	192.5	86.0	99.6	93.8
United States	227.9	108.6	98.2	104.1
WORLD TOTAL	1,099.0	97.7	102.3	102.7
B. *Zinc*				
Argentina	33.9	95.6	91.4	84.9
Bolivia	4.0	132.5	90.0	152.5
Guatemala	6.0	183.3	83.3	100.0
Mexico	268.2	100.3	93.5	89.4
Peru	178.0	97.6	127.3	137.6
Sub-total	490.1	103.2	109.8	113.1
Australia	294.8	99.3	105.3	109.0
Canada	390.1	103.1	116.7	116.1
United States	434.1	106.7	116.1	120.4
WORLD TOTAL	1,609.1	103.4	109.6	112.2

SOURCES: International Lead and Zinc Study Group, *Monthly Bulletin*, March, 1964; Mexico, Nacional Financiera, S.A.

[a] Estimate.

The regulations governing imports of crude petroleum and petroleum products into the United States changed somewhat in 1963, and were tightened up on imports from Venezuela. As shown in table 216, the increase of 12 per cent in imports of crude petroleum into the United States between 1960 and 1963 brought Venezuela practically no benefit, since the imports from that country in 1963 were only 1 per cent more than in 1960, after a considerable decline in 1961 and 1962. Moreover, the method in force since 1963 to restrict imports has had the effect of still further reducing Venezuela's chances of significantly increasing its exports to the United States in the immediate future, since imports from Canada are free of all restriction and they are taken into account when the proportion of imports to domestic production is calculated, which has to be maintained at 12.2 per cent.

Table 218. Lead and zinc: Consumption of refined metal in selected countries and world total

	Thousands of tons 1960	*Index: 1960=100*		
		1961	*1962*	*1963*[a]
A. *Lead*				
Federal Republic of Germany	239.7	97.6	100.9	101.6
France	165.4	99.0	94.4	103.2
Italy	78.0	107.6	116.6	...
Japan	95.3	129.2	120.3	117.4
Netherlands	51.0	107.0	100.1	...
United Kingdom	286.5	96.2	96.4	98.9
United States	809.2	102.7	111.3	116.1
WORLD TOTAL	2,212.3	103.5	107.3	112.0
B. *Zinc*				
Federal Republic of Germany	296.7	103.1	98.0	94.5
France	171.9	109.7	108.0	105.0
Italy	85.0	105.8	124.6	...
Japan	188.6	128.8	128.8	151.1
Netherlands	26.0	117.6	119.6	...
United Kingdom	275.9	93.4	88.9	93.3
United States	790.4	106.0	117.5	123.2
WORLD TOTAL	2,453.2	105.4	110.2	115.7

SOURCE: *Monthly Bulletin*, op. cit.

[a] Estimate.

(d) *Lead and zinc*

The depression in the world lead and zinc market lasted from 1957 to mid-1962. During this period there was an uninterrupted decline in prices, and at the beginning of 1962 price levels were the lowest since 1950. But although the price trend for the two metals was the same, the extent of the decline was not. In comparison with the already low level for 1960, average 1962 prices were 19 per cent less for lead and 10 per cent less for zinc. During the partial recovery that took place in 1963, however, the improvement in lead prices was relatively more marked, and it is significant that the average attained was 6.7 per cent lower for both metals than in 1960.

The sharper decline in lead prices in relation to those of zinc in 1960–62 reflected the more serious imbalance between lead production and consumption. Despite the restrictions on production applied voluntarily by some members of the International Lead and Zinc Study Group (restrictions usually imposed on lead rather than zinc), considerable lead surpluses accumulated. In order to lessen the impact of these surpluses on the market, in mid-1961 the United States Government decided to purchase a total of approximately 100,000 tons for its strategic reserves, thus withdrawing this amount from the commercial supply. The effect of these strategic purchases on the market can be judged by the fact that production controls had already become unnecessary by 1962 (see table 217).

Table 219. Lead and zinc: Value and volume of exports from Latin American countries

	Millions of dollars 1960	*Index: 1960=100*		
		1961	*1962*	*1963*[a]
A. *Lead*				
I. *Value*				
Bolivia . . .	4.8	85.4	72.9	83.3
Mexico . . .	33.7	110.4	76.3	78.6
Peru . . .	21.7	103.2	75.6	...
II. *Volume (index)*				
Bolivia . . .	100.0	94.7	86.2	...
Mexico . . .	100.0	117.3	92.9	...
Peru . . .	100.0	122.1	123.2	...
B. *Zinc*				
I. *Value*				
Bolivia . . .	1.2	108.3	75.0	83.3
Mexico . . .	29.1	94.1	90.0	92.8
Peru . . .	16.7	114.3	95.2	...
II. *Volume (index)*				
Bolivia . . .	100.0	132.1	92.8	...
Mexico . . .	100.0	102.7	92.8	...
Peru . . .	100.0	132.5	116.7	...

SOURCE: International Monetary Fund, *International Financial Statistics*.

[a] Estimate.

The evolution of the zinc market was less unfavourable, not only because the decline in prices was less intense, but also because output did not have to be reduced as in the case of lead. The evolution of consumption of these two metals in 1960–63 also followed different trends, the increases in zinc consumption being consistently higher than those in lead consumption (see table 218).

The partial recovery in the lead and zinc markets, however, did not lead to any change in the policy of quantitative import restrictions applied by the United States from the end of 1958 onwards. During 1959–62 these restrictions set a limit to the volumes of lead and zinc that could be exported to the United States for consumption in that country, but during the last quarter of 1963 some countries did not use the whole of their authorized quota.

Latin American exports of lead and zinc in 1962–63 were generally less than in 1960–61 in terms of value (see table 219). Although the evolution of the value and volume exported by each country differed appreciably for the two metals, the most important factor was the price decline between 1960 and 1962 which either partly offset the increase in the volume of exports, as in 1961, or else accentuated the decrease in the value of exports when there was a reduction in volume, as in 1962. Preliminary data for 1963 indicate that, notwithstanding a moderate improvement in prices, the value of exports did not return to the level attained in 1960.

Chapter IX

THE BALANCE OF PAYMENTS

A. GENERAL CONSIDERATIONS

As indicated in chapter I, the now chronic situation of the international account for the Latin American countries as a whole is one of the main obstacles to a more accelerated rate of economic development. Sometimes, as in 1963 when the capacity to import expanded considerably, the deficit that has accumulated in international payments over previous years makes it impossible to convert the increase in external purchasing power into actual imports. This state of affairs has been more noticeable in some of the major countries of the region, where an increase in exports has been accompanied by a gradual decline in imports as a result of pre-existing pressures on the international account. In other countries whose external payments position has become easier, the capacity to import has contracted, despite the persistence of the upward trend. In any case, it so happens that in 1963 the balance of payments for the region as a whole closed with a surplus, in marked contrast to the position in 1960–62 when there were considerable deficits (see table 220).

The figures for the balance of payments before compensatory financing illustrate this point (see item D of table 220). In fact, after the cumulative deficit of almost 1,700 million dollars between 1960 and 1962, the modest surplus of approximately 300 million dollars recorded in 1963 is patently insufficient to import the capital goods and industrial inputs needed for Latin America's economic development, especially since the surplus was achieved partly through a contraction in the volume of imports. Thus, even if Venezuela is excluded, problems similar in nature to those of 1960, 1961 and 1962 persisted in 1963 (see table 221).

Eight countries contributed to an improvement in the external position of the region as a whole, whether by achieving a surplus or by reducing their balance-of-payments deficit before compensatory financing, two suffered a deterioration in their own position, and in two the situation remained the same as in former years (Ecuador and Paraguay).

Outstanding among the first group of countries is Argentina which, after closing its external account with a considerable deficit in 1961 and 1962 (134 and 270 million dollars respectively), obtained a surplus of 252 million in 1963 through an expansion of its exports and a sharp contraction of imports. Bolivia, Uruguay and several Central American countries also went from a deficit in earlier years to a credit balance in 1963, while Brazil reduced its 1960 and 1962 deficits of 329 and 260 million dollars to 175 million, which is still a sizable amount. On the other hand, the Dominican Republic, Mexico, Peru and Venezuela increased the credit balances they had recorded on their international account in previous years.

Colombia and Chile—the two countries whose debit balance showed the sharpest fall in comparison with its 1962 level—closed their external payments account with a deficit which was, however, less than in 1960 and 1961. Nevertheless, as stated at the outset, these countries' external sector is affected by the cumulative pressures of the debit balance carried over from previous years.

B. THE BALANCE OF PAYMENTS ON CURRENT ACCOUNT

1. The balance on current account

If the current account is taken to comprise merchandise transactions (covering exports and imports calculated on an f.o.b. basis), services (including expenditures and receipts in respect of freight, insurance, travel, capital repayments and other similar items) and private donations, it will be seen that altogether these external transactions showed a considerable deficit in both 1956–60 and 1960–62. In the latter period the cumulative deficit amounted to nearly 3,200 million dollars in all. By contrast, a small deficit was recorded in 1963 of about 200 million dollars (see table 222).

Merchandise transactions for Latin America as a whole —calculated on an f.o.b. basis—resulted in an annual average credit balance of 932 million dollars during the quinquennium 1956–60, rising to over 1,285 million dollars in 1961–63. But service transactions showed a substantial deficit which easily offset the surplus, particularly in 1963. The situation is different if the figures for Venezuela are excluded from the regional total. On the one hand, merchandise transactions during the five years 1956–60 showed an annual average deficit of 94 million dollars which increased to 384 million in 1961–62. Only in 1963 was a credit balance recorded (see again table 222). On the other hand, the deficit under the head of services was less because the considerable outflow of foreign exchange represented by the servicing of private foreign capital invested in Venezuela's petroleum sector is not included. But the two trends fail to compensate one another, so that in the end the debit balance on current account is actually higher if Venezuela is excluded (some 5,320 million dollars accumulated between 1960 and 1963 instead of 3,380).

This disequilibrium in the balance of payments on current account is typical of a developing region. In fact, the existence of a deficit presupposes that the capital movements relating to national or foreign funds consistently produce a surplus in the region's favour that is

(Millions of dollars)

Item	1962			1961			1962			1963		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
A. Goods, services and private donations (1+2)	9,576.3	10,641.9	−1,065.6	9,828.6	11,004.6	−1,176.0	10,203.6	11,143.2	−939.6	10,816.5	11,019.5	−203.0
1. Goods and services	9,521.3	10,486.3	−965.0	9,765.8	10,845.7	−1,079.9	10,129.3	10,980.3	−851.0	10,867.8	10,748.4	−119.4
1.1. Merchandise (f.o.b.)	7,949.1	7,113.1	+836.0	8,145.9	7,343.1	+802.8	8,583.9	7,381.1	+1,202.8	9,142.5	7,325.2	+1,817.3
1.2. Non-monetary gold	29.1	10.9	+18.2	30.0	19.4	+10.6	30.7	18.2	+12.5	26.0	6.0	+20.0
Sub-total (1.1+1.2)	7,978.2	7,124.0	+854.2	8,175.9	7,362.5	+813.4	8,614.6	7,399.3	+1,215.3	9,168.5	7,331.2	+1,837.3
1.3. Freight, insurance and other transportation	286.8	912.9	−626.1	318.8	978.4	−659.6	331.6	998.1	−666.5	324.7	965.7	−641.0
1.4. Travel	726.8	588.9	+137.9	778.4	567.4	+211.0	794.3	597.9	+196.4	867.2	586.3	+280.9
1.5. Investment income	58.3	1,236.5	−1,178.2	91.7	1,400.5	−1,308.8	34.0	1,438.5	−1,404.5	29.6	1,421.3	−1,391.7
1.5.1. Direct investment	43.6	960.6	−917.0	78.7	1,081.0	−1,002.3	20.0	1,090.4	−1,070.4	16.0	1,057.8	−1,041.8
1.5.2. Other investment	14.7	275.9	−261.2	13.0	319.5	−306.5	14.0	348.1	−334.1	13.6	363.5	−349.9
1.6. Other services	470.8	623.6	−152.8	401.0	536.9	−135.9	354.8	546.5	−191.7	358.4	563.3	−204.9
2. Private donations	55.4	156.0	−100.6	62.8	158.9	−96.1	74.3	162.9	−88.6	68.1	151.7	−83.6
B. Official donations and non-compensatory capital	2,873.6	2,016.6	+857.0	2,981.4	1,907.5	+1,073.9	2,725.8	2,145.2	+580.6			+765.0
1. Official donations	141.7	9.0	+132.7	149.5	8.9	+140.6	148.1	10.5	+137.6			
2. Private long-term capital	1,337.8	847.7	+490.1	1,235.5	768.1	+467.4	1,318.8	1,143.9	+174.9			
2.1. Long-term liabilities	1,214.1	595.6	+618.5	1,151.4	522.6	+628.8	1,294.5	719.8	+574.7			
2.1.1. Direct investment	614.0	214.7	+399.3	398.1	109.2	+288.9	458.9	193.7	+265.2			
2.1.2. Other long-term liabilities	600.1	380.9	+219.2	753.3	413.4	+339.9	835.6	526.1	+309.5			
2.2. Long-term assets	123.7	252.1	−128.4	84.1	245.5	−161.4	24.3	424.1	−399.8			
3. Official long-term capital	650.8	656.3	−5.5	1,187.7	778.3	+409.4	869.0	567.9	+301.1			
3.1. Long-term liabilities other than balance-of-payments loans	649.2	570.5	+78.7	1,186.8	634.5	+552.3	869.0	468.2	+400.8			
3.2. Long-term assets	1.6	85.8	−84.2	0.9	143.8	−142.9	—	99.7	−99.7			
4. Short-term capital	743.3	503.6	+239.7	408.7	352.2	+56.5	389.9	422.9	−33.0			
C. Net errors and omissions			−417.7			−286.1			−308.6			−262.3
D. Balance of payments before compensatory financing			−626.3			−388.2			−667.6			+299.7
E. Compensatory financing	1,644.7	1,018.4	+626.3	1,160.2	772.0	+388.2	1,081.4	413.8	+667.6			−299.7
1. Deferred import payments	74.0	15.2	+58.8	15.6	38.1	−22.5	69.8	—	+69.8			
2. Balance-of-payments loans	391.5	171.0	+220.5	333.8	167.4	+166.4	200.9	163.6	+37.3			
3. Foreign exchange reserves	896.8	777.4	+119.4	763.8	462.4	+301.4	568.4	248.0	+320.4			
3.1. Liabilities	410.8	20.7	+390.1	63.0	188.4	−125.4	222.3	54.3	+168.0			
3.2. Assets	143.6	418.4	−274.8	405.1	228.2	+176.9	313.2	90.4	+222.8			
3.3. Net IMF position	342.4	338.3	+4.1	295.7	45.8	+249.9	32.9	103.3	−70.4			
4. Official monetary gold	300.2	72.6	+227.6	47.0	104.1	−57.1	242.3	2.2	+240.1			

SOURCE: International Monetary Fund, *Balance of Payments Yearbook*, vol .15.

Table 221. Latin America (excluding Cuba and Venezuela): Balance of payments, 1960–63

(Millions of dollars)

Item	1960			1961			1962			1963		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
A. Goods, services and private donations (1+2)	7,047.0	8,527.5	−1,480.5	7,246.5	8,869.9	−1,623.4	7,568.6	9,017.3	−1,448.7	8,157.7	8,929.2	−771.5
1. Goods and services	6,992.0	8,459.6	−1,467.6	7,183.7	8,794.8	−1,611.1	7,494.3	8,937.0	−1,442.7	8,089.6	8,861.5	−771.9
1.1. Merchandise (f.o.b.)	5,556.4	5,972.9	−416.5	5,693.9	6,249.5	−555.6	6,066.4	6,321.9	−255.5	6,593.1	6,279.9	+313.2
1.2. Non-monetary gold	29.1	5.8	+23.3	30.0	5.2	+24.8	30.7	11.8	+18.9	26.0	6.0	+20.0
Sub-total (1.1+1.2)	5,585.5	5,978.7	−393.2	5,723.9	6,254.7	−530.8	6,097.1	6,333.7	−236.6	6,619.1	6,285.9	+333.2
1.3. Freight, insurance and other transportation	266.2	740.0	−473.8	294.0	814.6	−520.6	313.1	838.7	−525.6	305.7	832.0	−526.3
1.4. Travel	723.1	513.0	+210.1	775.1	504.6	+270.5	791.1	527.5	+263.6	864.2	512.3	−351.9
1.5. Investment income	47.0	708.8	−661.8	75.9	817.2	−741.3	20.0	819.0	−799.0	15.0	813.2	−798.1
1.5.1 Direct investment	32.4	442.9	−410.5	64.2	520.3	−456.1	8.1	492.1	−484.0	4.0	465.7	−461.7
1.5.2. Other investment	14.6	265.9	−251.3	11.7	296.9	−285.2	11.9	326.9	−315.0	11.1	347.5	−336.4
1.6. Other services	369.8	518.7	−148.9	314.8	403.7	−88.9	273.0	418.1	−145.1	285.5	418.1	−132.6
2. Private donations	55.4	68.3	−12.9	62.8	75.1	−12.3	74.3	80.3	−6.0	68.1	67.7	+0.4
B. Official donations and non-compensatory capital	2,743.7	1,573.8	+1,169.9	2,726.1	1,267.8	+1,458.3	2,635.9	1,644.1	+991.8			+1,155.1
1. Official donations	141.6	9.0	+132.6	149.3	8.9	+140.4	147.9	10.5	+137.4			
2. Private long-term capital	1,329.2	696.6	+632.6	1,230.8	499.8	+731.0	1,294.9	785.6	+509.3			
2.1. Long-term liabilities	1,205.5	449.3	+756.2	1,146.7	450.7	+696.0	1,272.8	533.5	+739.3			
2.1.1. Direct investment	614.0	69.5	+544.5	398.1	38.8	+359.3	458.9	9.3	+449.6			
2.1.2. Other long-term liabilities	591.8	379.8	+211.7	748.6	411.9	+336.7	813.9	524.2	+289.7			
2.2. Long-term assets	123.7	247.3	−123.6	84.1	49.1	+35.0	22.1	252.1	−230.0			
3. Official long-term capital	552.9	405.3	+147.6	966.3	484.9	+481.4	816.3	474.5	+341.8			
3.1. Long-term liabilities other than balance-of-payments loans	551.3	327.8	+223.5	965.4	366.8	+598.6	816.3	385.9	+430.4			
3.2. Long-term assets	1.6	77.5	−75.9	0.9	118.1	−117.2	—	88.6	−88.6			
4. Short-term capital	720.0	462.9	+257.1	379.7	274.2	+105.5	376.8	373.5	+3.3			
C. Net errors and omissions			−5.7			−229.7			−282.5			−272.2
D. Balance of payments before compensatory financing			−316.3			−394.8			−739.4			+111.4
E. Compensatory financing	1,089.8	773.5	+316.3	1,131.5	736.7	+394.8	1,048.1	308.7	+739.4			−111.4
1. Deferred import payments	74.0	15.2	+58.8	15.6	38.1	−22.5	69.8	—	+69.8			
2. Balance-of-payments loans	191.5	171.0	+20.5	333.8	134.1	+199.7	200.9	96.9	+104.0			
3. Foreign exchange reserves	795.6	532.5	+263.1	735.1	460.4	+274.7	535.1	209.6	+325.5			
3.1. Liabilities	410.8	15.6	+395.2	63.0	186.4	−123.4	222.3	51.6	+170.7			
3.2. Assets	143.6	313.6	−170.0	376.4	228.2	+148.2	279.9	54.7	+225.2			
3.3. Net IMF position	241.2	203.3	+37.9	295.7	45.8	+249.9	32.9	103.3	−70.4			
4. Official monetary gold	46.5	72.6	−26.1	47.0	104.1	−57.1	242.3	2.2	+240.1			

SOURCE: As for table 220.

exactly equal in amount to the deficit, thereby ensuring the general equilibrium of the balance of payments. It is axiomatic that developing countries such as Latin America are net capital importers until such time as they can attain the level or degree of development at which domestic resources characteristically replace external sources of financing. This is the reason why the credit balance for capital movements is recorded as a debit entry on current account.

Be that as it may, an examination of the figures in table 222 will show the sharp fluctuations undergone by the balance on current account during the years under consideration. These are even clearer in the regional total from which the figures for Venezuela are excluded.

Table 222. Latin America (excluding Cuba): Balance of payments on current account

(*Millions of dollars*)

Period or year	*Exports*			*Imports*			*Net external investment income*			*Balance on current account*
	Goods[a] f.o.b.	*Services[b]*	*Total*	*Goods f.o.b.*	*Services[c]*	*Total*	*Direct investment*	*Interest on loans and other*	*Total*	
					(a) *Total for Latin America (excluding Cuba)*					
1956–60[d] .	7,950.7	1,295.5	9,246.4	−7,018.8	−2,141.4	−9,160.2	−1,041.3	−177.5	−1,218.8	−1,132.6
1960 .	7,967.3	1,484.4	9,451.7	−7,113.1	−2,226.0	−9,339.1	−917.0	−261.2	−1,178.2	−1,065.6
1961 .	8,156.5	1,498.2	9,654.7	−7,343.1	−2,178.8	−9,521.9	−1,002.3	−306.5	−1,308.8	−1,176.0
1962 .	8,596.4	1,480.7	10,077.1	−7,381.1	−2,231.1	−9,612.2	−1,070.4	−334.1	−1,404.5	−939.6
1963[e] .	9,162.5	1,550.3	10,712.8	−7,325.2	−2,198.9	−9,524.1	−1,041.8	−349.9	−1,391.7	−203.0
					(b) *Total for Latin America (excluding Cuba and Venezuela)*					
1956–60[d] .	5,496.4	1,190.6	6,687.0	−5,589.8	−1,583.5	−7,173.3	−369.2	−176.0	−545.2	−1,031.5
1960 .	5,579.7	1,359.1	6,938.8	−5,972.9	−1,784.6	−7,757.5	−410.5	−251.3	−661.8	−1,480.5
1961 .	5,718.7	1,383.9	7,102.6	−6,249.5	−1,735.2	−7,984.7	−456.1	−285.2	−741.3	−1,623.4
1962 .	6,085.3	1,377.2	7,462.5	−6,321.9	−1,790.3	−8,112.2	−484.0	−315.0	−799.0	−1,448.7
1963[e] .	6,613.1	1,455.4	8,068.5	−6,279.9	−1,762.0	−8,041.9	−461.7	−336.4	−798.1	−771.5

SOURCE: *Balance of Payments Yearbook*, op. cit., vols. 12, 13, 14 and 15.

[a] Including net flow of non-monetary gold.

[b] Including gross income from non-financial services.

[c] Including disbursements for non-financial services and net private donations.

[d] Annual average.

[e] Estimates.

Such fluctuations are all the more suggestive in the light of the foregoing observations since they show the effect on Latin America of the abrupt changes that have taken place in external financing from year to year and the extremely vulnerable nature of its external economy. In actual fact, these changes in the balance on current account indicate that net capital inflows—which are by definition exactly equal to the balance on current account but of an opposite sign—increased from 1956–60, and between that year and 1961, but declined in 1962 and 1963, especially in the latter when they were 850 million dollars less than in 1961 (with Venezuela excluded). If Venezuela is included, the contraction sharpens to about 970 million dollars (see again table 222).

In principle, the decrease in the balance is attributable to a number of factors which, operating severally or together, specifically make for a weaker rate of inflow for foreign capital, a more rapid outflow of domestic capital or the strengthening of Latin America's international monetary reserves. If each country's situation is analysed individually, all three factors will be discernible in Latin America (see section C of this chapter).

2. THE TRADE BALANCE

The trade balance for exports and imports is the most important part of the current account. Throughout the period under review, this account consistently reflected a large credit balance for the region, with Venezuela included. If the figures for Venezuela are excluded, it will be seen that the trade balance was negative, except in 1963 (see table 223).

The credit balance was due, on the export side, to an increase in the exports of a number of countries, particularly Argentina (150 million dollars). On the import side, it should be noted that there was a sharp drop in the foreign purchases made by Argentina (327 million dollars) and Uruguay (48 million dollars), although other countries, despite the heavy strain on their balance of payments, continued to import on a large scale (Brazil, Chile, etc.).

(a) *Exports*

The figures in table 223 show, *inter alia*, the evolution of total export values, by country, in 1956–63. Latin America as a whole, registered annual increments of about 5.4 and 6.9 per cent in 1962 and 1963 respectively,[1] thus for the first time exceeding the levels reached in 1956–57 and 1960–61, which until then had been the highest ever recorded. However, what is true for the region as a whole does not apply to individual countries. In the group of coffee-exporting countries, for example, sales by Brazil and Colombia were, during most of the period 1960–63, below the levels reached in the previous decade. This was largely due to the sharp drop in coffee prices, but also indicates that these countries have failed to develop new exports on a sufficiently large scale to counteract the decline. The other commodities exported that rank next to coffee in importance

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[1] Based on f.o.b. values.

Table 223. Latin America (excluding Cuba): Trade balance

(*Millions of dollars at f.o.b. value*)

Country	1956–60			1961			1962			1963[a]		
	Exports	*Imports*	*Balance*	*Exports*	*Imports*	*Balance*	*Exports*	*Imports*	*Balance*	*Exports*	*Imports*	*Balance*
Argentina	1,000.1	1,018.6	−18.5	964.1	1,270.5	−306.4	1,216.0	1,180.2	+35.8	1,365.5	853.5	+512.0
Bolivia	66.0	74.1	−8.1	59.9	75.8	−15.9	62.0	91.5	−29.5	72.0	104.5	−32.5
Brazil	1,334.2	1,202.6	+131.6	1,405.0	1,292.0	+113.0	1,215.0	1,304.0	−89.0	1,407.0	1,316.0	+91.0
Chile	437.5	408.0	+29.5	444.7	559.1	−114.4	485.0	499.8	−14.8	502.0	610.0	−108.0
Colombia	566.4	466.4	+100.0	476.5	530.8	−54.3	484.8	502.0	−17.2	486.5	476.6	+9.9
Costa Rica	81.2	91.0	−9.8	83.3	96.0	−12.7	92.7	102.6	−9.9	96.0	115.3	−19.3
Dominican Republic	141.4	112.7	+28.7	138.9	72.1	+66.8	169.6	131.3	+38.3	174.2	153.0	+21.2
Ecuador	137.2	100.5	+36.7	132.0	108.7	+23.3	149.1	114.1	+35.0	168.5	126.4	+42.1
El Salvador	116.5	101.9	+14.6	118.8	100.8	+18.0	138.9	115.5	+23.4	152.7	138.0	+14.7
Guatemala	113.5	129.6	−16.1	114.0	120.6	−6.6	114.1	124.1	−10.0	155.3	133.6	+21.7
Haiti	37.1	38.5	−1.4	32.4	38.0	−5.6	40.3	42.3	−2.0	40.2	36.4	+3.8
Honduras	69.6	65.4	+4.2	74.0	66.3	+7.7	82.6	73.9	+8.7	84.0	81.1	+2.9
Mexico	772.2	1,075.4	−303.2	839.3	1,103.0	−263.7	940.6	1,114.5	−173.9	979.2	1,203.9	−224.7
Nicaragua	69.1	60.1	+9.0	69.9	58.7	+11.2	90.4	78.7	+11.7	103.5	91.4	+12.1
Panama	41.3	96.2	−54.9	41.4	123.8	−82.4	65.2	146.1	−80.9	70.0	166.0	−96.0
Paraguay	36.3	40.6	−4.3	43.9	48.7	−4.8	40.4	41.1	−0.7	38.7	40.6	−1.9
Peru	342.7	332.3	+10.4	511.1	400.5	+110.6	557.0	462.8	+94.2	558.6	478.6	+80.0
Uruguay	140.9	182.9	−42.0	174.7	189.3	−14.6	153.4	209.2	−55.8	165.2	161.0	+4.2
Venezuela	2,458.0	1,432.4	+1,025.6	2,452.0	1,107.8	+1,344.2	2,517.5	1,065.6	+1,451.9	2,549.4	1,045.3	+1,504.1
Latin America (excluding Cuba)	7,961.2	7,029.2	+932.0	8,175.9	7,362.5	+813.4	8,614.6	7,399.3	+1,215.3	9,168.5	7,331.2	+1,837.3
Latin America (excluding Cuba and Venezuela)	5,503.2	5,596.8	−93.6	5,723.9	6,254.7	−530.8	6,097.1	6,333.7	−236.6	6,619.1	6,285.9	+333.2

SOURCE: As for table 222.

[a] Estimates.

also played a part in lowering the total value of those countries' exports, namely, cacao, sugar and lumber in Brazil and crude petroleum in Colombia. On the other hand, in three other countries of the same group—El Salvador, Guatemala and Nicaragua—the rapid expansion of cotton exports amply offset the reduction in coffee and banana sales.[2]

However, the emergence of new export lines has not been a general feature in the Latin American countries. Apart from cotton in the three countries mentioned, the only other examples that can be cited are fish meal in Peru, and very recently in Chile, bauxite in the Dominican Republic, copper in Peru, and the rapid growth of sugar exports from Mexico and Central America in response to the sudden expansion of the United States market after the ban on imports from Cuba.[3]

The quantum of exports from the Dominican Republic in 1960 was the highest ever recorded thanks to the favourable combination of circumstances in its sugar market that year. The partial cancellation of Cuba's sugar quota in the United States market in mid-1960 proved a powerful stimulus for the Dominican Republic's sugar exports, whose quantum increased 52 per cent over its average for the past four years, while their unit value went up by 10 per cent as a result of the higher price then quoted in the United States compared with the price on the free world market. However, the high levels of sugar production and exports in 1960 could not be kept up, and there was, in addition, a steady drop in coffee prices and a considerable reduction in the volume of cacao exports, whose price also fell steadily. But the improvement in the unit value of sugar exports, on the one hand, and the rising export earnings of bananas, tobacco and bauxite, on the other, counteracted the effect of the reduction in the volume of sugar exports and the drop in cacao and coffee prices, values in 1962 and 1963 thereby surpassing the levels achieved in 1960.

Exports from Ecuador declined in 1961 and 1962 owing to a contraction in the volume of banana sales abroad and lower prices for the other two staples—cacao and coffee. Although the position of these two items showed no improvement in 1963, banana exports increased considerably, exceeding in both volume and value the levels reached in preceding years. Exports of bananas from Honduras declined over the long term (in contrast to the trend in Ecuador), but the deterioration was partly offset by its sales of lumber. Lastly, Panama's traditional exports (bananas, cacao and coffee) have gradually shrunk since 1955, reaching their lowest point for that period in 1960. In 1961, they recovered slightly, but the high levels they attained in 1962 and 1963 were due to their first exports of refined petroleum products made from imported crudes.

Argentina and Uruguay present notable disparities, although the composition of their staple exports is much the same. The value of Argentina's exports in 1960 represented the culmination of a period of buoyancy which had lasted for several years, following the contraction in 1955. Nevertheless, the level reached in 1960 was not as high as in 1950, 1951 or 1953. The wide fluctuations in the total value of exports throughout this period were mainly the result of changes in exportable wheat surpluses. The diminution of exports in 1961 involved wheat and maize above all, and was basically due to a reduction in volume attributable, in its turn, to a drop in production. When production recovered in 1962, exports surpassed the levels attained in previous years, helped on by the gradual improvement of world wheat prices. In 1963 exports of wheat, maize and other cereals again declined, but less drastically than in 1961, and the impact of the decline on total exports was offset by an increase in sales of meat and other livestock products.

In 1957 Uruguay's exports fell far below their level in 1956, and since then have gone through a difficult period. Wool exports (which normally represent over 50 per cent of the total value) were the most seriously affected, since their value declined considerably between 1956 and 1957, but the contraction in wheat was even more intensive in relative terms, and since 1959 this commodity has disappeared entirely from the export market. The contraction first reflected a general reduction in output and then in the export quantum of wool, meat and wheat; but since 1958 an additional factor has been the marked deterioration in wool prices, which, even after a partial comeback in 1963, are still less than in 1956–57. The quantum of wool and meat exports has improved slightly in recent years, but wheat exports were not resumed until the end of 1963.

The evolution of Mexico's exports, which is relatively favourable if the period 1960–63 is taken by itself, becomes less so when it is remembered that the 1955–56 levels were very close to those attained in 1962. The value of cotton and coffee exports has gradually fallen below its level in those years, owing mainly to a drop in the prices of these two commodities, but also to the decrease in the export quantum and lower prices for copper, lead and zinc. Sugar exports, which were of scant importance before 1957, increased considerably in 1960 thanks to the favourable conditions then prevailing in the United States market—and went up still further in 1961. However, production during those years lagged behind exports, which means that the large volume of exports was achieved at the expense of drastic inroads on stocks. At the end of 1961 sugar stood at relatively low levels and the volume of exports in 1962 and 1963 had to be slashed in relation to the figures reached in 1960 and 1961. Mexico's export sector is reasonably diversified and in recent years has succeeded in promoting exports of a good many commodities which, if taken individually, are not very important, but together make a sizable contribution to the country's economic growth.

In 1960 Paraguay's exports were at their lowest since 1948. Throughout the period there were frequent and relatively wide fluctuations in the total value of exports, generally reflecting changes in the quantum of certain exports (particularly lumber, cotton, vegetable oils and meat) and sometimes accentuated by the drop in prices. In 1961 and 1962 all these commodities made a sound recovery, and although cotton exports showed a moderate decline in 1963 the substantial increment in the volume of meat, vegetable oils and tobacco sales enabled the total value of exports to reach the highest figure ever recorded.

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[2] Colombia's cotton exports increased as well, but their share in the total value of exports is still very small.

[3] Argentina, Colombia and Ecuador also had occasional sugar surpluses for export.

In 1960 Peru witnessed the large-scale development of new copper deposits, which resulted in an increase of 41 per cent in total exports in comparison with their figures in the four preceding years. Although copper was chiefly responsible for the improvement, the growth of exports in the following years was based on other commodities, some, like sugar and cotton, being traditional items, and others, such as fish products, of recent development. In this sense, evolution of Peru's exports has been unparalleled in Latin America. The prices of some of its primary exports fell during the period in question, particularly long-staple cotton, sugar, lead and zinc, but the effects of this were partly offset by an expansion in the export quantum. At the same time, there was an increase in exports of a number of agricultural commodities which a few years earlier were not being sold abroad.

Bolivia's exports, consisting mainly of mining products, developed to a fair extent in 1960–63, but, as in the case of other countries, failed to regain the levels they had maintained during most of the fifties. The value of total exports was less in 1960 and in 1958 than at any other time in the post-war period, thus reflecting not only a sharp drop in tin prices but also a severe contraction in the volume of tin exported. After 1960 tin prices rose considerably, but production and exports did not succeed in recovering their former volume. Exports of other metals—tungsten, lead, zinc and copper—also decreased in volume during the past few years, and the effect of the decline was enhanced by falling prices for these metals between 1960 and 1962. Furthermore, the structure of exports has not undergone any significant change, so that prospects of a continued period of buoyancy are largely dependent upon completion of the programme of technical improvements now being carried out in the mining industry.

A modest increase took place in Chile's total exports between 1960 and 1962, despite the difficulties with which its principal commodity—copper—had to contend. The expansion in the quantum of copper exports was restrained, since the large mining companies, in common with producers in the United States and Africa, generally followed a policy of price stability. Nitrate exports, which fell to very low levels in 1960, recovered in the next three years, while the rapid growth of iron ore exports continued. The fisheries industry—which has recently acquired importance—also increased its exports, but they are still fairly negligible in terms of value.

In Venezuela, the growth of production and exports of crude petroleum and petroleum products continued, but other export sectors met with difficulties. There was a moderate decline in agricultural exports—chiefly cacao and coffee—and also in iron ore, although in the latter case, the reduction was due to the entry into operation of the steel industry which will supply the domestic market with manufactured products and has already started to export pig-iron.

The general conclusion to be drawn from this summary of the evolution of exports by country is that, in most cases, the increases recorded in 1960–63 merely represented the recovery of levels reached by some of those countries in earlier years. In other words, the improvement shown by many countries should not give rise to undue optimism; the prospects for Latin America's traditional exports are not wholly encouraging and the development of new export lines does not yet have a basis that is compatible with economic development needs.

(b) *Imports*

As stated previously, the cumulative deficits in the balance of payments of many Latin American countries led, in the last few years, to a continuation of the pressures under which the international account has been labouring for some time. In spite of this, all countries faced with a critical balance-of-payments position (except Argentina, Colombia and Uruguay) kept their imports at a high level; this is explained by their need to maintain their external purchases of raw materials, fuels and capital goods in order to sustain current economic activities and avoid unemployment in activities that might be affected by a shortage of essential inputs. On rare occasions, however, such imports may also have been of consumer goods, and even luxury items.

However, total figures for the region show that the rising trend of imports in 1956–60 and again in 1961 and 1962 was followed by a drop of 68 million dollars in 1963 with respect to the previous year's level (see again table 223), and the decline was considerable even if the figures for Venezuela are excluded.

3. The services account

It is difficult to analyse the evolution of the various sections of the services account because of the great delay in obtaining reliable data. However, it may be useful to examine in broad outline—on the basis of available figures—the development of the different sections of this account between 1960 and 1962, and to make some very tentative estimates for 1963, in order to assess its influence on the general balance on current account.

With this object in view, all transactions in respect of services have been classified into four principal groups, viz.: (*a*) freight, insurance and other transactions connected with transport; (*b*) travel; (*c*) foreign investment income; and (*d*) other services.

(a) *Freight and insurance on international shipments and other transportation*

According to the definitions established by the International Monetary Fund, which are employed in this report, this account includes freight and direct insurance (i.e., excluding reinsurance of international shipments of merchandise and gold entered under other services), as well as other transactions connected with international transportation.

Freight and direct insurance are recorded in accordance with the following convention. When they apply to the carriage of merchandise up to the point where such merchandise is valued (uniform valuation point), they are considered as transactions between the exporter and the carrier and insurer; when they concern the carriage of merchandise beyond this point, they are considered as transactions between the importer and the carrier and insurance company. Freight and insurance are calculated on an f.o.b. basis, that is to say, the frontier of the exporting country is chosen as the uniform oint of valuation (the frontier of the Latin American ountry in the case of exports), and the frontier of the oreign country in the case of imports, For this reason, reight and insurances charges incurred on exports eceived by enterprises domiciled in Latin America are ecorded as a credit entry in the region's balance of ayments, whether the payments in question have been nade by the exporters or by the importers.

On the other hand, freight and insurance charges on mports are included as a debit entry in the balance of ayments when they are received by foreign carriers and nsurance companies, and are omitted when they are eceived by Latin American enterprise.[4]

The other transactions connected with international ransportation include time charters,[5] port disbursements, bunker oil, bunker coal, ships' stores and similar upplies, stevedoring, harbour and airfield dues, towing, epair and maintenance, passenger fares[6] and other ransactions (coastal traffic carried on by foreign enterprises in Latin American countries being recorded as a lebit, and the same traffic carried on by Latin American nterprises abroad as a credit).

The international transportation account, as thus lefined, was unfavourable to Latin America during the ast four years. If the region is considered as a whole, he total cumulative deficit on this account during the eriod 1960–63 reached some 2,600 million dollars. An appreciable part of this may be attributed to Venezuela, but if the figures referring to that country are excluded from the regional total, the adverse balance accumulated is still considerable: some 2,000 million dollars in four years. To appreciate the importance of these figures, it is enough to compare them with merchandise transactions calculated on an f.o.b. basis; it will then be observed that in the region as a whole the transportation deficit absorbed 55.0 per cent of the trade surplus, and, if Venezuela is excluded, the deficit appears as more than double the cumulative debit balance on the merchandise account.

As might be expected, the size of the transportation deficit varied from one year to the next (see tables 224 and 225). For the region as a whole, it increased between 1960 and 1961, remained roughly the same in 1962, and fell in 1963 to less than the 1960 level. It may therefore be stated that the trend towards a certain improvement in the transportation account in favour of the region between 1956 and 1960 was reversed during the last three years.

However, the course of development varied considerably from one country to another (see again table 225). Thus, for example, the increase in the deficit for the region as a whole between 1960 and 1961 may be attributed to only seven countries out of a total of nineteen (Argentina, Bolivia, Chile, Haiti, Panama, Paraguay and Peru), as the deficit diminished in the remaining twelve countries. In 1962 the debit balance of the transport account for Latin America as a whole did not change substantially, because the increase in the freight and transportation deficit in twelve countries (Bolivia, Brazil, Colombia, Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Nicaragua, Panama, Peru and Venezuela), was offset by the decrease in the deficit in the remaining seven countries.

It is, in fact, very difficult to interpret the trend of income and expenditure in respect of international transportation on the region's balance of payments because this covers transactions of widely differing kinds. However, as a first approximation, it may be stated that the credit entries on the transportation account have as their principal component the freight and marine insurance paid to Latin American enterprises in respect of exports, and that the debit entries correspond chiefly to freight and marine insurance paid to foreign enterprises in respect of imports. The trend of both series of figures depends, therefore, on three factors: (i) changes in freight and insurance rates; (ii) changes in the volume of exports transported by Latin American shipping companies; and (iii) changes in the volume of imports transported by foreign shipping companies.

In 1961 freight rates (and probably insurance rates too, since they show similar fluctuations) underwent an increase over their 1960 levels, according to the indexes established by the maritime nations. Since the total volume of the region's exports—and probably also the proportion of those exports shipped by Latin American enterprises—continued to increase as in previous years, receipts recorded on the transport account rose by 32 million dollars between 1960 and 1961. But the trend towards recovery of the volume of total imports—and undoubtedly also of the proportion of imports carried in foreign vessels—which had begun in 1960, became more marked in 1961, so that expenditure in respect of freight and insurance rose by 65.5 million dollars between 1960 and 1961. In consequence, the deficit on the transportation account expanded by some 33.5 million dollars.

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[4] However, in the IMF *Balance of Payments Yearbooks*, which are he source of the figures quoted in this report, freight and direct nsurance are calculated on an f.o.b. export and c.i.f. import basis or six countries (Argentina, Chile, El Salvador, Haiti, Mexico nd Uruguay). In order to obtain comparable data for all the atin American countries, the c.i.f. imports of these six countries vere recalculated on an f.o.b. basis, a certain percentage being leducted from the c.i.f. figures in respect of freight and insurance harges paid to foreign carriers and insurance companies, in ccordance with the method already used in another ECLA study. See *External financing in the economic development of Latin merica*, General Methodological Note to appendices I and II, /CN.12/649/Rev. 1.) Thus, the freight and insurance figures for he six countries referred to must also be readjusted. This second eadjustment must be considered as approximate. In the case of a alculation on an f.o.b. basis for exports and c.i.f. for imports, the reight and insurance charges on imports are omitted from the alance of payments when they are received by foreign enterprises nd credited to it when they are received by Latin American nterprises. To estimate the figures on an f.o.b. basis, the freight nd insurance premiums paid to foreign enterprises were added o the debit side of the freight and insurance account, but it was ot possible to deduct from the credit side of that account the reight and insurance accruing on imports received by Latin merican enterprises so that the c.i.f. figures entered on the credit ide of the account after the readjustment are slightly overstated. owever, these small discrepancies with regard to six countries ut of a total of nineteen do not, presumably, seriously distort the ransport account for the region as a whole.

[5] A time charter is the lease by the owner of a carrier to a person r enterprise, whether manager or charterer, resident abroad. ayments made by managers or charterers resident in Latin merica in respect of foreign-owned carriers are recorded as a ebit entry in the Latin American balance of payments. On the ther hand, payments received by owners of carriers who are esident in Latin America for the lease of these carriers to managers r charterers resident abroad are recorded in the balance of payments as a credit.

[6] This does not include payments received by Latin American nterprises for the transport of tourists when they are travelling vithin Latin American countries (credit), or payments made by ersons resident in Latin America when they are travelling in oreign countries (debit). These transactions are recorded on the ravel account.

In 1962 freight and insurance rates were less than in the previous year. On the other hand, exports and imports continued to increase in volume, the former more rapidly than the latter. Income accruing from freight and insurance therefore increased almost as much in absolute value as expenditure between 1961 and 1962, so that the deficit in the transport account varied very little from one year to the next.

In 1963 the decrease that took place in the transportation deficit despite the fresh rise in freight and insurance rates may be attributed to the contraction in the volume of imports. In order to assess the influence of freight and insurance expenditure on the general stability of the balance of payments on current account, such expenditure may be calculated as a percentage of the total inflow of foreign exchange on current account. Table 226, which is based on this calculation, shows that the percentage increased slightly between 1960 and 1961 (from 9.5 to 10.0 per cent for the region is considered as a whole, and from 10.5 to 11.2 per cent if Venezuela is excluded from the total), because of the rise in transport costs as a result of higher freight and insurance

Table 224. Latin America: Freight, insurance and other items of transportation, 1960–63
(*Millions of dollars*)

Year or period	*Latin America (excluding Cuba)*			*Latin America (excluding Cuba and Venezuela)*		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
1960	286.8	912.9	−626.1	266.2	740.0	−473.8
1961	318.8	978.4	−659.6	294.0	814.6	−520.6
1962	331.6	998.1	−666.5	313.1	838.7	−525.6
1963[a]	324.7	965.7	−586.3	305.7	832.0	−526.3
Average 1956–60	236.8	914.6	−677.8	214.6	714.4	−499.8
Average 1960–63	315.5	963.8	−648.3	294.7	806.3	−511.6

SOURCE: As for table 222.

[a] Estimates.

Table 225. Latin America: Freight, insurance and other items of transportation, by country, 1960–62
(*Millions of dollars*)

Country	*1960*			*1961*			*1962*		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
Argentina[a]	116.7	225.6	−108.9	126.4	273.5	−147.1	131.8	258.5	−126.7
Bolivia	—	11.3	−11.3	0.1	12.6	−12.5	0.8	16.0	−15.2
Brazil	48.0	131.0	−83.0	52.0	132.0	−80.0	44.0	128.0	−84.0
Chile[a]	18.2	61.7	−43.5	27.6	77.5	−49.9	31.4	73.3	−41.9
Colombia	39.1	69.7	−30.6	42.8	73.0	−30.2	48.1	79.5	−31.4
Costa Rica	2.9	13.1	−10.2	3.6	12.9	−9.3	4.2	13.1	−8.9
Dominican Republic	4.5	8.9	−4.4	4.4	8.5	−4.1	4.9	20.4	−15.5
Ecuador	—	17.6	−17.6	—	16.8	—16.8	—	18.4	−18.4
El Salvador[a]	1.4	11.2	−9.8	1.2	10.4	−9.2	1.1	12.0	−10.9
Guatemala	2.9	17.1	−14.2	2.9	16.3	−13.4	3.7	16.8	−13.1
Haiti[a]	3.2	4.5	−1.3	0.9	4.3	−3.4	4.1	5.9	−1.8
Honduras	1.5	8.0	−6.5	1.8	7.3	−5.5	1.4	7.6	−6.2
Mexico	0.2	41.7	−41.5	0.3	40.0	−39.7	0.3	40.1	−39.8
Nicaragua	5.7	15.7	−10.0	5.9	15.1	−9.2	6.9	20.3	−13.4
Panama	7.2	19.4	−12.2	8.2	21.0	−12.8	7.1	20.9	−13.8
Paraguay	1.3	5.7	−4.4	1.1	7.4	−6.3	1.4	6.7	−5.3
Peru	11.8	54.5	−42.7	12.8	66.7	−53.9	13.8	76.3	−62.5
Uruguay	1.6	23.3	−21.7	2.0	19.3	−17.3	8.1	24.9	−16.8
Sub-total	266.2	740.0	−473.8	294.0	814.6	−520.6	313.1	838.7	−525.6
Venezuela	20.6	172.9	−152.3	24.8	163.8	−139.0	18.5	159.4	−140.9
TOTAL	286.8	912.9	−626.1	318.8	978.4	−659.6	354.6	998.1	−666.5

SOURCE: As for table 222.

[a] Original data on the basis of exports f.o.b. and imports c.i.f., placed on a uniform f.o.b. basis.

rates and a larger volume of imports. On the other hand, this same percentage was less in 1962 than in 1961 (falling from 10.0 to 9.8 per cent if the region is considered as a whole, and from 11.2 to 11.1 per cent if Venezuela is excluded), owing to a slackening off in the rate of increase of transport costs following upon a drop in freight and insurance rates.

Table 226. **Latin America: Gross expenditure on freight, insurance and other items of transportation, 1960–62**

(*Percentage of foreign exchange earnings on current account*)

Year or period	*Latin America (excluding Cuba)*	*Latin America (excluding Cuba and Venezuela)*
1960 . . .	9.5	10.5
1961 . . .	10.0	11.2
1962 . . .	9.8	11.1
1956–60 . .	9.8	10.6
1960–63 . .	9.5	10.7

SOURCE: As for table 222.

Furthermore, when the period 1960–63 is considered as a whole, transport costs absorbed a slightly smaller percentage of the total inflow of foreign exchange on current account than in the quinquennium 1956–60, so that their incidence on the equilibrium of the balance on current account was not accentuated over the long term.

(b) *Travel*

The travel account is the only sector of the services account that has been consistently favourable to Latin America in recent years. Its cumulative credit balance for the period 1960–63 was about 820 million dollars if the region is considered as a whole, and some 1,100 million if Venezuela is excluded. Venezuela's transactions in respect of travel showed a large deficit (see table 227).

The surplus is accounted for by six countries in every year—Costa Rica, Guatemala, Haiti, Mexico, Panama and Uruguay—and by Ecuador and Peru as well in the last two years (see table 228); these countries accumulated in three years (1960–62)[7] a credit balance of some 1,030 million dollars on the travel account, whereas the remaining eleven countries showed a cumulative deficit of some 490 million.

On the other hand, in two of the countries (Mexico and Panama), which showed the highest net income in respect of travel,[8] a large proportion may be attributed to transactions of a very special nature. Thus, in Mexico, a large part of the surplus (53.3 per cent in 1960, 53.1 per cent in 1961 and 53.0 per cent in 1962) corresponds to transactions recorded in that country's balance of payments under the heading of border travel. This section consists principally of purchases made in Mexico (credit) by United States citizens resident in the border area during short periods spent on the Mexican side of the border. Also included under this heading are the purchases made in similar circumstances in the United States (debit) by Mexicans living near the border. Transactions of this nature can hardly be considered as normal transactions falling under the heading of the tourist industry, and are really a form of frontier commerce.

Table 227. **Latin America: Travel, 1960–63**

(*Millions of dollars*)

Year or period	*Latin America (excluding Cuba)*			*Latin America (excluding Cuba and Venezuela)*		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
A. *Total travel:*						
1960	726.8	588.9	+137.9	723.1	513.0	+210.1
1961	778.4	567.4	+211.0	775.1	504.6	+270.5
1962	794.3	597.9	+196.4	791.1	527.5	+263.6
1963[a]	867.2	586.3	+280.9	864.2	512.3	+351.9
Average, 1956–60 .	613.7	490.6	+123.1	610.8	397.5	+213.3
Average, 1960–63 .	791.6	585.1	+206.5	788.4	514.4	+274.0
B. *Travel, excluding Mexican border travel and Panama Canal Zone travel:*						
1960	347.5	367.8	−20.3	343.8	291.9	+51.9
1961	369.7	325.4	+44.3	366.4	262.6	+103.8
1962	368.9	353.3	+15.6	365.7	282.9	+82.8
1963[a]	402.5	321.1	+81.4	399.5	247.1	+152.4
Average, 1956–60 .	270.7	291.6	−20.9	267.8	198.5	+69.3
Average, 1960–63 .	372.2	341.9	+30.3	368.8	271.1	+97.7

SOURCE: As for table 222.

[a] Estimates.

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[7] There are no figures available for 1963 on travel transactions by countries.

[8] The surplus on Mexico's travel account was 271.8 million dollars in 1960; 283.9 million in 1961 and 306.0 million in 1962, i.e., respectively 83.5, 82.2 and 84.5 per cent of the surplus recorded for the eight countries in question.

In Panama, a large proportion of net receipts on the travel account (74 per cent in 1960, 71 per cent in 1961 and 70 per cent in 1962) correspond to transactions recorded as travel in and from the Canal Zone, which show similar characteristics to those recorded in Mexico's balance of payments.

In these circumstances, there is good reason for excluding from the travel account of Latin America as a whole those items corresponding to border travel in Mexico, and to travel in and from the Panama Canal Zone, in order to obtain figures corresponding to transactions that are proper to the tourist trade, that is to say, transactions effected by visitors to a foreign country during a sufficiently prolonged stay, when the main motive for their visit is not the purchase of merchandise. The transactions, as thus defined, show a surplus very much smaller than that recorded for the travel account: 121.1 million dollars as opposed to 826.2 million during the period 1960–63.

Table 228. Latin America: Travel, by country, 1960–62

(*Millions of current dollars*)

Country	*1960*			*1961*			*1962*		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
Argentina	3.7	18.4	−14.7	9.7	25.9	−16.2	8.7	40.9	−32.2
Bolivia	0.5	1.2	−0.7	0.6	1.1	−0.5	1.7	2.9	−1.2
Brazil	23.0	72.0	−49.0	23.0	42.0	−19.0	5.0	30.0	−25.0
Chile	33.9	67.4	−33.5	35.7	61.4	−25.7	40.6	48.1	−7.5
Colombia	22.7	28.3	−5.6	22.6	24.1	−1.5	12.6	22.8	−10.2
Costa Rica	6.9	5.2	+1.7	7.4	5.5	+1.9	7.8	6.8	+1.0
Dominican Republic	3.0	5.1	−2.1	2.5	4.2	−1.7	5.9	16.6	−10.7
Ecuador	3.8	4.3	−0.5	4.7	3.2	+1.5	4.7	3.8	+0.9
El Salvador	6.4	10.4	−4.0	4.8	9.7	−4.9	4.9	10.9	−6.0
Guatemala	5.8	3.5	+2.3	6.1	4.0	+2.1	6.1	4.3	+1.8
Haiti	8.1	2.7	+5.4	8.3	0.9	+7.4	6.0	1.4	+4.6
Honduras	1.2	1.7	−0.5	1.3	1.7	−0.4	1.3	1.7	−0.4
Mexico	521.3	249.5	+271.8	556.7	272.8	+283.9	585.3	279.3	+306.0
Nicaragua	2.0	5.3	−3.3	2.2	6.8	−4.6	2.4	7.1	−4.7
Panama	25.1	7.1	+18.0	29.9	7.4	+22.5	34.9	7.1	+27.0
Paraguay	0.9	1.7	−0.8	1.2	1.5	+0.3	0.9	1.6	−0.7
Peru	19.1	19.5	−0.4	23.4	22.2	−1.2	28.5	25.0	+3.5
Uruguay	35.7	9.7	+26.0	35.0	10.2	+24.8	33.8	17.2	+16.6
Sub-total	723.1	513.0	+210.0	775.1	504.6	+270.5	791.1	527.5	+263.6
Venezuela	3.7	75.9	−72.2	3.3	62.8	−59.5	3.2	70.4	−67.2
TOTAL	726.8	588.9	+137.9	778.4	567.4	+211.0	794.3	597.9	+196.4
Less: Adjustment for Mexican border travel and Panama Canal Zone travel	*379.3*	*221.1*	*+158.2*	*408.7*	*242.0*	*+166.7*	*425.4*	*244.6*	*+180.8*
ADJUSTED TOTAL	*347.5*	*367.8*	*−20.3*	*369.7*	*325.4*	*+44.3*	*368.9*	*353.3*	*+15.6*

SOURCE: As for table 222.

From a study of the year-to-year trend of the travel account, it is possible to discern a considerable improvement in the region's favour during the last four years (see again table 227). The credit balance in this sector for the region as a whole rose from 137.9 million dollars in 1960 to 211.0 million in 1961, 196.4 million in 1962 and 281.0 million in 1963. These figures show that from 1960 onwards there was a clear and sustained upward trend in the net inflow of foreign exchange in respect of travel; in fact, this inflow reached an annual average of 206.5 million dollars during the period 1960–63 as compared with the figure of 123.1 million recorded in the quinquennium 1956–60.

Although this trend remains the same when the figures for Venezuela are excluded, it becomes less favourable if border transactions in Mexico and Panama are excluded. In the region as a whole, the remaining transactions—which can be correctly considered as tourist transactions—showed a moderate surplus in 1961 (44.3 million dollars) in comparison with the small deficit in 1960 (20.3 million dollars), which dwindled in 1962 to 15.6 million, rising to 81.4 million in 1963. With Venezuela excluded, the surplus showed a marked increase between 1960 and 1961; its rate of growth slackened off in the following year but recovered in 1963.

In consequence, the increase in the net inflow of foreign exchange into Latin America in respect of its travel account may be attributed in 1961 largely to tourist transactions in the strict sense of the term, and in 1962 to border transactions. In the region as a whole the increase in net receipts in respect of such tourist transactions constituted 80 per cent of the increase in net income on the travel account between 1960 and 1961, whereas a decrease took place between 1961 and 1962, the same trend being observable if Venezuela is excluded.

Finally, it should be pointed out that expenditure on travel, although increasing less than the corresponding ceipts, exceeded the total inflow of foreign exchange n current account because of the slowness with which e other types of income expanded. Consequently, such penditure brought increasing pressure to bear on the neral equilibrium of the balance of payments on urrent account. The proportion of total current income foreign exchange destined for the financing of this penditure grew from 5.2 per cent in 1956–60 to 5.8 r cent in 1960–63 for the region as a whole, and from 8 per cent to 6.9 per cent, if Venezuela is excluded ee table 229). This trend was modified only in 1963 hen the value of exports rose more rapidly. In the outh American countries, where the trend has been a ource of concern since 1955 (Brazil and Chile), tourist penditure has been on the decline since 1960, doubtless wing to the marked rise in the rate of exchange which scouraged residents from travelling abroad.

Table 229. Latin America: Expenditure on travel, 1960–63
(*Percentage of foreign exchange earnings on current account*)

Year or period	*Latin America (excluding Cuba)*	*Latin America (excluding Cuba and Venezuela)*
60 . . .	6.1	7.3
61 . . .	5.7	7.0
62 . . .	5.9	7.0
63 . . .	5.4	6.3
56–60 . .	5.2	5.8
60–63 . .	5.8	6.9

Source: As for table 222.

(c) *Investment income*

This account includes income obtained by persons sident in Latin America from foreign investments redit), and income obtained by foreigners on their nancial investments in Latin America (debit). It cludes both real and imputed income, but excludes come obtained from the use of real assets (hire of lms, time charters, lease of real estate, etc.).

All transactions recorded in this account are grouped to two sections: (i) direct investment income, which cludes income received by Latin American residents om direct investment enterprises[9] abroad (credit), and lso income received by foreigners from direct investment enterprises in the region; and (ii) other investment come, consisting chiefly of dividends paid on portfolio vestment, and interest on long- and short-term loans.

Income from direct investments includes both the istributed and undistributed profits of subsidiaries and ranches. The credit and debit entries corresponding to uch profits are balanced against their offsetting entries n the capital account. Thus, for example, unremitted arnings from foreign subsidiaries and branches in atin America are recorded twice in the regional balance f payments, once as an outgoing item under investment come on current account, and again as a credit entry nder direct investment on the non-compensatory capital ccount.

The investment income account, thus defined, evolved in a way that was highly unfavourable to the Latin American countries in recent years, as is to be expected in the case of developing countries which are net importers of capital. The cumulative deficit on this account was nearly 5,300 million dollars during the period 1960–63, that is to say, more than 1,300 million dollars on an annual average.[10]

Nearly half this deficit (43.2 per cent) may be attributed to Venezuela, where direct investment servicing in the petroleum sector has been maintained at a very high level during recent years. If this country is excluded, the net outflow of foreign exchange in respect of investment income may be estimated as 3,000 million dollars during the period 1960–63 (an annual average of 750 million), which is less than the total quoted above for the region as a whole, but still very much larger than any adverse balance recorded for a single item on the current account.[11]

However, the investment income account fluctuated to a certain extent from 1960 onwards. The deficit varied relatively little from one year to the next (see table 230), as was to be expected, since the outgoings in this account maintain a relatively stable relationship to the total amount of foreign capital invested in the region, and this does not undergo very great percentage variations from one year to another. In fact, for the region as a whole, the deficit expanded from 1,178.2 to 1,308.8 million dollars between 1960 and 1961 (11.1 per cent), went up by a further 7 per cent in 1962 and remained almost the same in 1963. The annual variations are hardly more pronounced if Venezuela is excluded, since net outgoings in respect of investment rose by 12.0 per cent in 1960–61 and 7.8 per cent in 1962, and then maintained the same level in 1963.

Despite these short-term fluctuations, the debit balance on the investment income account tended to increase in the long run, and the annual average for the period 1960–63 was higher than that recorded for 1956–60. The trend is not very marked if Venezuela is included in the regional total, since in this case the average annual deficit increased from 1,218.8 million dollars in 1956–60 to 1,320.8 million in 1960–63 (an increment of 8.4 per cent), because the profits of the oil companies operating in that country have tended to decline since 1956–57. On the other hand, the trend towards a greater net outflow under the head of investment income is much more pronounced if Venezuela is excluded, since the annual average then rises from 545.2 million dollars in 1956–60 to 750.1 million in 1960–63, i.e., by 37.6 per cent.

At the same time, the structure of the deficit tended to change, This phenomenon can be discerned even over the short term, since the net outflow in respect of investment income fluctuated from one year to the next, whereas the net outgoings in respect of other investment income (portfolio investment and loans) showed regular increases; consequently the proportion corresponding to the latter type of investment rose steadily.[12] However, this trend is much more apparent in the long run; the proportion of the deficit corresponding to transactions in respect of investment income (excluding direct investment) increased from 14.5 per cent in 1956–60 to 23.7 per cent in 1960–63 for the region as a whole, and from 32.3 per cent in 1956–60 to 39.6 per cent in 1960–63, if Venezuela is excluded. This trend is an outcome of the rapid increase in Latin America's foreign debt in recent years.

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[9] Direct investment enterprises may be defined as private enterrises controlled from abroad by persons who retain a sufficient roportion of the capital to exercise such control.

[10] For purposes of comparison it may be noted that the surplus recorded on the merchandise transactions account, estimated on an f.o.b. basis, totalled more than 4,700 million dollars during the period 1960–63, i.e., an average of 1,180 million per year.

[11] The deficit on the transport account for the region as a whole (excluding Venezuela) reached more than 2,000 million dollars during the period 1960–63, i.e., an average of 510 million per year.

Table 230. Latin America: Investment income, 1960–63

(*Millions of dollars*)

Year and origin of income	*Latin America (excluding Cuba)*			*Latin America (excluding Cuba and Venezuela)*		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
1960						
Direct investment income	43.6	960.6	−917.0	32.4	442.9	−410.5
Other investment income	14.7	275.9	−261.2	14.6	265.9	−251.3
TOTAL	58.3	1,236.5	−1,178.2	47.0	708.8	−661.8
1961						
Direct investment income	78.7	1,081.0	−1,022.3	64.2	520.3	−456.1
Other investment income	13.0	319.5	−306.5	11.7	296.9	−285.2
TOTAL	91.7	1,400.5	−1,308.8	75.9	817.2	−741.3
1962						
Direct investment income	20.0	1,090.4	−1,070.4	8.1	492.1	−484.0
Other investment income	14.0	348.1	−334.1	11.9	326.9	−315.0
TOTAL	34.0	1,438.5	−1,404.5	20.0	819.0	−799.0
1963[a]						
Direct investment income	16.0	1,057.8	−1,041.8	4.0	465.7	−461.7
Other investment income	13.6	363.5	−349.9	11.1	347.5	−336.4
TOTAL	29.6	1,421.3	−1,391.7	15.1	813.2	−798.1
Annual average 1956–60						
Direct investment income	27.1	1,068.4	−1,041.3	15.9	385.1	−369.2
Other investment income	16.2	193.7	−177.5	13.0	189.0	−176.0
TOTAL	43.3	1,262.1	−1,218.8	28.9	574.1	−545.2
Annual average 1960–63						
Direct investment income	39.6	1,047.5	−1,007.9	27.2	480.3	−453.1
Other investment income	13.8	326.7	−312.9	12.3	309.3	−297.0
TOTAL	53.4	1,374.2	−1,320.8	39.5	789.6	−750.1

SOURCE: As for table 222.

[a] Estimates.

The upward trend of the deficit on the investment income account derives logically from the fact that income paid abroad in respect of investment has outweighed incoming income from abroad under the same head. To assess the effect of the increase in payments on the general equilibrium of the region's balance of payments on current account, by the same method as that already used for travel and transportation expenditure, the payments are calculated as a percentage of the total current inflow of foreign exchange (see table 231).

On the basis of this calculation, two observations may be made. In the first place, remittances abroad of investment income absorbed an increasing part of Latin America's current supply of foreign exchange. This trend is less noticeable if Venezuela is included in the regional total, owing to the decline in the oil companies' profits since 1956–57, but becomes very pronounced if Venezuela is excluded, for in this case the proportion of foreign exchange allocated to finance transfers of investment income abroad rose from 8.1 to 10.0 per cent between 1956–60 and 1960–62 (see again table 231). Secondly, the increase in the relative burden represented by transfers of investment income abroad is primarily imputable to the increase in the interest paid on loans granted to the region rather than to the increase in direct investment earnings. In fact, interest on loans represented an increasing part of the current foreign exchange supply (from 1.9 per cent in 1956–60 to 3.1 per cent in 1960–63 for the region as a whole, and from 2.6 per cent in 1956–60 to 4.0 per cent in 1960–62 if Venezuela is excluded), whereas direct investment profits occupied a smaller share, or varied very little.

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[12] The net outflow in respect of income accruing from portfolio investment and loans, calculated as a percentage of the total net outgoings on the investment income account, rose from 22.2 per cent in 1960 to 23.4 per cent in 1961, 23.8 per cent in 1962 and 25.1 per cent in 1963, for the region as a whole. The same trend is observable if Venezuela is excluded.

able 231. Latin America: Net outflow of direct investment income, 1960–63

(Percentage of foreign exchange earnings on current account)

Year and origin of income	*Latin America (excluding Cuba*	*Latin America (excluding Cuba and Venezuela)*
960		
Direct investment income .	9.6	5.8
Other investment income .	2.7	3.6
TOTAL	12.4	9.7
961		
Direct investment income .	10.2	6.3
Other investment income .	3.1	3.0
TOTAL	13.3	10.2
962		
Direct investment income .	10.5	6.4
Other investment income .	3.3	4.2
TOTAL	13.8	10.6
963[a]		
Direct investment income .	9.6	5.7
Other investment income .	3.2	4.1
TOTAL	12.9	9.8
verage 1956–60		
Direct investment income .	11.1	5.5
Other investment income .	1.9	2.6
TOTAL	13.0	8.1
verage 1960–63		
Direct investment income .	10.0	6.0
Other investment income .	3.1	4.0
TOTAL	13.1	10.0

SOURCE: As for table 222.

[a] Estimates.

(d) *Other services*

This account includes transactions recorded, according o the definitions established by the International Monetary Fund, in the following two accounts: (i) government ransactions not included elsewhere on the balance f payments, covering civilian and military expenditure y foreign governments in Latin America (credit) and by Latin American governments in other countries (debit), unless these are entered as official donations; and (ii) other services, which comprise all service transactions not included elsewhere on the balance of payments, such as non-merchandise insurance, personal income, management fees, underwriters' commissions for underwriting the issue of securities, agents' fees, construction activities, communications (international settlements made in connexion with posts, telegraph, telephone and radio), subscriptions to press, film rentals, real estate rentals, etc.

Table 232. Latin America: Other services, 1960–63

(Millions of dollars)

Year or period	*Latin America (excluding Cuba)*			*Latin America (excluding Cuba and Venezuela)*		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
1960	470.8	623.6	−152.8	369.8	518.7	−148.9
1961	401.0	536.9	−135.9	314.8	403.7	−88.9
1962	354.8	546.5	−191.7	273.0	418.1	−145.1
1963[a]	358.4	563.3	−204.9	285.5	418.1	−132.6
Average 1956–60 . .	445.1	656.3	−211.2	365.1	458.5	−93.4
Average 1960–63 . .	396.3	567.6	−171.3	310.8	439.7	−128.9

SOURCE: As for table 222.

[a] Estimates.

The very diversity of the transactions included in the other services account makes it impossible to give an orderly interpretation of the trend followed by the account. However, it can be stated that it was constantly unfavourable to the region in the past four years, although the debit balance was small, namely, about 680 million dollars during the period 1960–63 or an annual average of 170 million for the region as a whole.

On the other hand, the deficit decreased between 1960 and 1961, although it went up again in 1962 and 1963. Despite these short-term fluctuations, its long-term tendency was to diminish, since it shrank from 210 million dollars in 1956–60 to 170 million in 1960–63, possibly because of the efforts made by a number of Latin American Governments to reduce expenditure on diplomatic representation and other expenses abroad (see table 232).

4. PRIVATE DONATIONS ACCOUNT

This account covers all transfer payments not involving a *quid pro quo* received from abroad by private persons resident in Latin America (credit) or made by such persons to persons abroad (debit). Consequently, it includes not only donations but also obligatory remittances (for example, taxes paid to foreign Governments by persons resident in the region).

The transactions recorded in this account consist chiefly, on the credit side, of donations received by Latin American private institutions (religious, educational, charitable, etc.) from official or private sources abroad, and migrants' transfers, i.e., real and financial capital which immigrants actually transfer to Latin America from their country of origin. As regards the debit entries, the greater part of the transactions probably consist of remittances made by immigrants, i.e., recurrent transfer payments made to persons resident abroad by immigrants who have settled in Latin America.

Table 233. Latin America: Private donations, 1960–63

(*Millions of dollars*)

Year or period	*Latin America (excluding Cuba)*			*Latin America (excluding Cuba and Venezuela)*		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
1960	55.4	156.0	−100.6	55.4	68.3	−12.9
1961	62.8	158.9	−96.1	62.8	75.1	−12.3
1962	74.3	162.9	−88.6	74.3	80.3	−6.0
1963[a]	68.1	151.7	−83.6	68.1	67.7	+0.4
Average 1956–60 . .	43.6	123.5	−79.9	43.6	56.6	−13.0
Average 1960–63 . .	65.2	157.4	−92.2	65.2	72.9	−7.7

SOURCE: As for table 222.

[a] Estimates.

It may therefore be considered that the transactions entered on the credit and debit side of the private donations account consist of transfers of income rather than of capital, and are therefore included in the balance of payments on current account.

In any case, private transfer payments are of limited importance in the region's external payments. As table 233 indicates, transfer payments showed a continual deficit, which may be calculated at an annual average of nearly 100 million dollars during the period 1960–63; however, the figure is considerably less (some 8 million dollars) if Venezuela is excluded, owing to the size of the remittances effected by immigrants settled in that country.

C. TRANSACTIONS ON CAPITAL ACCOUNT IN 1960–63

1. GENERAL CHARACTERISTICS OF THE CAPITAL ACCOUNT ON LATIN AMERICA'S BALANCE OF PAYMENTS

Net capital inflows on the region's balance of payments may be defined as the total amount of financial resources supplied to the Latin American countries through transactions registered on the capital account. This includes not only movements of foreign funds (i.e., funds owned by persons residing in foreign countries) that lead to changes in Latin America's liabilities vis-à-vis the rest of the world, but also movements of domestic funds (i.e., funds owned by persons residing in Latin America), which are reflected in variations in the region's assets abroad. Hence, this concept should not be considered as the equivalent of a net inflow of foreign capital, since the movements of domestic funds during the past few years were by no means negligible, as will be seen below (see section (*a*)).

The net capital inflow may be estimated by the direct and the indirect method. In the first case, it is measured by the algebraic balance of all the changes in the region's foreign assets and liabilities brought about by capital transactions. In the second case, it is deemed to be equal and opposite to the balance on current account, since the changes in the region's foreign assets and liabilities deriving from capital transactions are the counterpart of other capital or current transactions, so that their final balance, by definition, offsets the deficit or surplus on current account. Since both estimates cannot be the same owing to incomplete coverage of current and capital transactions, the difference between them is entered in the balance of payments under the head of net errors and omissions.

As indicated earlier, Latin America was a net importer of capital in 1960–63 and its balance of payments on current account was therefore consistently unfavourable. Calculated by the indirect method, the net inflow of capital into Latin America as a whole (excluding Cuba) was about 3,380 million dollars during the period in question, or an annual average of about 750 million (seet able 234). These figures become 5,320 million and 1,330 million dollars respectively if Venezuela is excluded, as that country had a substantial surplus on current account.

The distribution of this capital influx varied considerably, of course, from one Latin American country to another. If Cuba and Venezuela are omitted, it will be noted that in 1960–62 (a period for which reliable data are available), five countries (Argentina, Brazil, Chile, Colombia and Mexico) absorbed more than 85 per cent, calculated by the indirect method, while eleven countries (Bolivia, Costa Rica, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Nicaragua, Panama, Paraguay and Uruguay) together received less than 18 per cent of the net capital inflow, and the two remaining countries (the Dominican Republic and Peru) recorded capital outflows since they had accumulated positive balances on current account (see table 235).

The amount of the net capital inflow—estimated by the indirect method—varied considerably from year to year, depending on the fluctuations in the balance on current account: it rose between 1960 and 1961, dropped to almost the same extent in 1962, and seems to have suffered a sharp contraction in 1963. For the region as a whole, the inflow was less in 1960–63 (850 million ollars on an annual average) than in 1956–60 (when it as 1,100 million), although the contraction may be ttributed exclusively to Venezuela. Without that ountry, the net capital inflow increased over the long rm, rising from an annual average of more than 1,000 illion dollars to over 1,300 million in 1960–63.

The net inflow actually registered on the capital account was well above the figure required to offset the deficit on current account (see again table 234). In fact, estimated by the direct method, it amounted to an annual average of nearly 1,200 million dollars for Latin America as a whole in 1960–63 and to more than

Table 234. Latin America: Net capital inflow, 1960–63

(*Millions of dollars*)

Year or period	*Latin America (excluding Cuba)*			*Latin America (excluding Cuba and Venezuela)*		
	Indirect estimate of net capital inflow	*Direct estimate of net capital inflow*	*(1+2) Net errors and omissions*	*Indirect estimate of net capital inflow*	*Direct estimate of net capital inflow*	*(4−5) Net errors and omissions*
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
1960	+1,065.6	+1,483.3	−417.7	+1,480.5	+1,486.2	−5.7
1961	+1,176.0	+1,462.1	−286.1	+1,623.4	+1,853.1	−229.7
1962	+939.6	+1,248.2	−308.6	+1,448.7	+1,731.2	−282.5
1963[a]	+203.0	+465.3	−262.3	+771.5	+1,043.7	−272.2
Average 1956–60	+1,132.6	+1,505.8	−373.2	+1,031.5	+1,166.6	−135.1
Average 1960–62	+1,060.4	+1,397.9	−337.5	+1,517.5	+1,690.1	−172.6
Average 1960–63	+846.0	+1,164.7	−318.7	+1,331.0	+1,528.5	−197.5

SOURCE: As for table 222; estimates for 1963 according to the sources quoted in the Methodological Note.

[a] Estimates.

Table 235. Latin America: Net capital inflow, by country, 1960–62

(*Millions of dollars*)

Country	*1960*			*1961*			*1962*		
	Indirect estimate of net capital inflow	*Direct estimate of net capital inflow*	*Net errors and omissions (1−2)*	*Indirect estimate of net capital inflow*	*Direct estimate of net capital inflow*	*Net errors and omissions (4−5)*	*Indirect estimate of net capital inflow*	*Direct estimate of net capital inflow*	*Net errors and omissions (7−8)*
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*
rgentina	+204.9	+222.3	−17.4	+584.5	+577.1	+7.4	+272.8	+277.7	−4.9
olivia	+32.9	+33.7	−0.8	+32.1	+33.9	−1.8	+48.0	+50.7	−2.7
razil	+560.0	+568.0	−8.0	+304.0	+255.0	+49.0	+503.0	+578.0	−75.0
hile	+149.7	+132.5	+17.2	+279.8	+329.7	+49.9	+163.0	+208.3	−45.3
olombia	+84.5	+100.1	−15.6	+141.8	+131.0	+10.8	+134.0	+109.5	+24.5
osta Rica	+19.3	+20.4	−1.1	+17.8	+19.6	−1.8	+20.1	+26.2	−6.1
ominican Republic	−42.7	−25.5	−17.2	−42.0	+1.8	−43.8	+3.6	+19.7	−16.1
cuador	+16.8	+21.1	−4.3	+25.7	+28.0	−2.3	+15.5	+12.2	+3.3
l Salvador	+28.4	+31.1	−2.7	+1.8	+20.8	−19.0	0.0	+4.7	−4.7
uatemala	+30.9	+27.2	+3.7	+28.5	+31.7	−3.2	+33.3	+32.8	+0.5
aiti	−2.5	+2.8	−5.3	+5.1	+6.7	−1.6	+1.9	+2.0	−0.1
onduras	−2.5	−1.8	−0.7	0.0	+1.1	−1.1	+6.5	+8.7	−2.2
exico	+288.2	+222.6	+65.6	+192.9	+338.2	−145.3	+109.3	+203.5	−94.2
icaragua	+10.2	+10.9	−0.7	+7.0	+6.8	+0.2	+12.8	+16.9	−4.1
anama	+38.8	+52.4	−13.6	+35.4	+30.2	+5.2	+33.1	+31.3	+1.8
araguay	+13.7	+14.8	−1.1	+10.7	+11.6	−0.9	+7.6	+9.1	−1.5
eru	−31.7	−27.5	−4.2	−18.2	−22.7	+4.5	+20.2	+46.7	−26.5
ruguay	+81.6	+81.1	+0.5	+16.5	+52.6	−36.1	+64.0	+93.2	−29.2
Sub-total	+1,480.5	+1,486.2	−5.7	+1,623.4	+1,853.1	−229.7	+1,448.7	+1,731.2	−282.5
enezuela	−414.9	−2.9	−412.0	−447.4	−391.0	−56.4	−509.1	−483.0	−26.1
TOTAL	+1,065.6	+1,483.3	−417.7	+1,176.0	+1,462.1	−286.1	+939.6	+1,248.2	−308.6

SOURCE: As for table 222.

1,500 million if Venezuela is excluded, whereas, estimated by the indirect method, it amounted to only 850 million and 1,330 million dollars respectively. Hence, the errors and omissions were negative, which means that some of the foreign exchange receipts entered under certain balance-of-payments headings were overstated, or else that part of the outflow was understated.

However, the net inflow fluctuated in the same way as the net inflow estimated indirectly, that is to say, in the opposite way to the deficit on current account. For the region as a whole, the inflow fell from 1,483.3 million dollars in 1960 to 1,462.1 million in 1961, i.e., by 1.4 per cent between the two years. In 1962 it amounted to only 1,248.2 million dollars, which was 15 per cent less than in the previous year. The downward trend seems to have continued even more intensively in 1963 although net inflows may have been in excess of the provisional figure given in the capital balance (465.3 million dollars), since the data available so far cover only part of the capital movements during that year.[13]

If Venezuela is excluded, similar fluctuations will be noted except in 1961; the net recorded capital inflow rose to 1,486.2 million dollars in 1960 and to 1,853.1 million in 1961, dropping to 1,731.2 million in 1962 and apparently falling steeply in 1963. Because of the decline in the net capital inflow since 1961, the level attained in 1960–63 (nearly 1,200 million dollars) was lower than in the five-year period 1956–60 (1,500 million), a circumstance which may be imputed to Venezuela alone, where private foreign capital investment was exceptionally high in 1956 and 1957. If Venezuela is excluded, the net capital inflow estimated by the direct method seems to have increased over the long term, from 1,160 million dollars in 1956–60 to more than 1,500 million in 1960–63.

Owing to the difference between net capital inflow measured by the direct and by the indirect method, errors and omissions represented a negative sum of nearly 1,300 million dollars in the last four years, or an annual average of over 300 million for Latin America as a whole (see again table 235).

The very fact that errors and omissions are so large obviously reduces the scope of any analysis of capital transactions between Latin America and the rest of the world, and therefore raises the question of their exact significance. In this connexion, reference will briefly be made to the main conclusions reached on the subject in an earlier ECLA study:[14]

(*a*) Negative errors and omissions are sometimes due to overstatement of foreign exchange receipts or to understatement of expenditure of the same in respect of transactions on current account. The most striking case in point is Mexico, where continuous and substantial negative errors in the balance of payments may partly be explained by the fact that the foreign exchange outflow under the head of border travel was understated (or the inflow was overstated).

(*b*) As a general rule, however, negative errors and omissions are more probably to be found at the level of capital transactions and are apparently due less to overstatement of inflows than to understatement of capital outflows.

(*c*) The most significant of the unregistered outflows correspond to new short- or long-term investment abroad effected by private persons resident in Latin America (flight of capital).

(*d*) Thus, in spite of the fact that the amount of errors and omissions does not provide an accurate measurement of the flight of capital, changes in their level give a rough idea of the trend of flight. In other words, it may be assumed that the flight of private capital accelerates whenever negative errors and omissions are shown or increase, and slackens off whenever the errors and omissions are positive, provided that no other factors have intervened.

The above conclusions apply to errors and omissions registered in the balance of payments after the Second World War but are equally valid for the period 1960–63, except that the data included in the balance of payments for 1962 are provisional and consist of very approximate estimates for 1963; consequently, the significance of the balance of errors is very difficult to determine accurately during those two years. It will be noted (see again table 234) that negative errors and omissions decreased slightly between 1960 and 1961 in the region as a whole, probably because of the expansion in private capital outflows from Venezuela, but increased again in 1962. If Venezuela is excluded, the negative balance of errors tended to rise between 1960 and 1962, increasing from 5.7 million dollars in 1960 to 229.7 million in 1961 and 282.5 million in 1962. The figures available for 1963 indicate that the negative balance of errors and omissions decreased for Latin America as a whole (with Venezuela excluded). This was probably due to the fact that capital inflows registered in the balance of payments were greatly understated in that year since the data currently available cover only a small portion of the movements that actually occurred. In these conditions, the evolution of errors and omissions seems to suggest a tendency for the outflow of capital to become more rapid in the past few years.

At this stage of the analysis it appears desirable to group the transactions registered on the capital account in such a way as to enable the relative importance of the movements of foreign and domestic funds to be determined.

With the aid of the method applied in the aforementioned ECLA study, these transactions have been classified in tables 236 and 237 into four main categories: movements of foreign funds relating to changes in Latin America's foreign liabilities; movements of domestic funds relating to changes in Latin America's foreign assets; net errors and omissions; and movements of gross gold and foreign exchange reserves which constitute a specific group of movements of domestic funds since they relate to changes in the assets of the monetary authorities.

An analysis of the capital transactions thus classified leads to the following conclusions: in 1961 the net inflow of foreign capital increased substantially in relation to the previous year's level for the region as a whole (from

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[13] Analysis of the evolution of the capital account in 1963 is no less difficult than that of the balance of services, owing to the considerable delay in obtaining reliable data. Hence, the data available on capital transactions are incomplete and cannot be supplemented by estimates based on figures for earlier years because of the violent short-term fluctuations in these transactions.

[14] ECLA, *External financing in the economic development of Latin America* (E/CN.12/649/Rev. 1), chapter IV.

412.8 million dollars in 1960 to 1,781.0 million in 1961, an increase of 26.1 per cent). However, the registered ovements of domestic funds, which had been marked a net repatriation of foreign exchange in 1960 (117.7 illion dollars), showed a net capital outflow of 438.7 illion in 1961. While it is true that net errors and nissions—which to some extent reflect unregistered ovements of domestic funds—showed a debit balance at declined slightly from year to year, probably because improved private capital transactions in Venezuela, it equally true that, if net errors are added to the sum of gistered movements of domestic funds in order to btain an approximate figure for total registered and nregistered movements of domestic funds, it will be oted that the net foreign exchange expenditure deriving om the movements in question increased sharply etween 1960 and 1961 (from 300 million dollars to 24.8 million). Consequently, in spite of the significant nprovement in external financing, the Latin American ountries had to draw on their gross gold and foreign xchange reserves in order to offset the growing deficit n current account (these reserves, which had increased y 47.2 million dollars in 1960, dropped by 119.8 million 1961).

Table 236. Latin America: A summary of net movements of foreign and domestic funds on capital account, 1960–63

(*Millions of dollars*)

Year or period	*Net capital inflow*	*Net foreign funds*	*Net domestic funds*	*Net errors and omissions*	*Net domestic funds and errors and omissions (3–4)*	*Gross monetary reserves (increase–)*
	(*1*)	(*2*)	(*3*)	(*4*)	(*5*)	(*6*)
A. Latin America (excluding Cuba)						
1960 .	+1,065.6	+1,412.8	+117.7	−417.7	−300.0	−47.2
1961 .	+1,176.0	+1,781.0	−438.7	−286.1	724.8	+119.8
1962 .	+939.6	+1,422.6	−637.3	−308.6	−945.8	+462.9
1963[a] .	+203.0	...	...	−226.3	...	...
Average 1956–60 .	+1,132.6	+1,581.6	−50.8	−373.2	−424.0	−25.0
Average 1960–62 .	+1,060.4	+1,538.8	−319.4	−337.5	−656.9	+178.5
B. Latin America (excluding Cuba and Venezuela)						
1960 .	+1,480.5	+1,546.5	+135.8	−5.7	+130.1	−196.1
1961 .	+1,623.4	+1,920.9	−158.9	−229.7	−388.6	+91.1
1962 .	+1,448.7	+1,723.4	−457.5	−282.5	−740.0	+465.3
1963[a] .	+771.5	...	...	−272.2	...	...
Average 1956–60 .	+1,031.5	+1,204.8	−21.4	−135.1	−156.5	−16.8
Average 1960–62 .	+1,517.5	+1,730.2	−160.2	−172.6	−332.8	+120.1

SOURCE: As for table 222.

[a] Estimates.

The position was even worse in 1962. The net foreign apital inflow into Latin America was less than in 1961 contracting from 1,781.0 million dollars in 1961 to ,422.6 million in 1962, i.e., by 20.1 per cent). Meanhile, net registered or unregistered outflows of domestic unds increased even more than in the previous year 945.8 million dollars against 724.8 million in 1961). onsequently, there was a further drain on gold and foreign exchange reserves (which fell nearly 500 million below their 1961 level), despite a reduction in the deficit on current account.

Lack of sufficient data makes it difficult to determine the movements of foreign and domestic funds in 1963. On the one hand, transactions financed by foreign capital seem to have been less than in the previous year in respect of inflow. On the other hand, the data available on registered movements of domestic funds are only fragmentary and the debit balance for errors and omissions decreased; the change may, however, be due to the understatement of foreign capital inflows rather than to a reduction in the flight of capital. Finally, there is reason to believe that the foreign capital inflow and domestic capital outflow varied little from one year to the next, but that, as the deficit on current account dropped sharply, the Latin American countries were able to replenish part of their gross gold and foreign exchange reserves.

It cannot be claimed that the figures on which the above analysis is based are absolutely accurate, particularly as regards the movements of domestic funds. What is obvious, however, is that between 1960 and 1962, when there was a substantial outflow of domestic funds, the foreign capital inflow was insufficient to offset the deficit on current account, and, as a result, monetary reserves continued the critical downward trend that had already been noted during the period 1956–60. The situation changed in 1963, to judge by the direct and indirect figures available. But this was essentially due to the fact that the balance of payments before compensatory financing closed with a small surplus, which gave monetary reserves an upward impetus. The total volume of external financing was consequently reduced.

Even if Venezuela is excluded from the analysis, the sum of the movements of domestic and foreign funds will be seen to have exceeded the amount of the current deficit—which has been sinking rapidly—the improvement in the position of reserves thus being accompanied, in all the other countries considered as a whole, by a decrease in over-all external financing.

Table 237. Latin America: Net movements of foreign and domestic funds on capital account, 1960–63

(*Millions of dollars*)

Item	*Latin America (excluding Cuba)*				*Latin America (excluding Cuba and Venezuela)*			
	1960	*1961*	*1962*	*1963*[a]	*1960*	*1961*	*1962*	*1963*[a]
I. Net capital inflow	+1,065.6	+1,176.0	+939.6	+203.0	+1,480.5	+1,623.4	+1,448.7	+771.5
II. Net foreign funds	+1,412.8	+1,781.0	+1,422.6		+1,546.5	+1,920.9	+1,723.4	
1. Net non-compensatory foreign funds	+739.3	+1,512.6	+1,217.9		+1,034.1	+1,617.2	+1,449.3	
Official donations	+132.7	+140.6	+137.6		+132.6	+140.4	+137.4	
Private long-term capital (liabilities)	+618.5	+628.8	+574.7		+756.2	+696.0	+739.3	
Official long-term capital (liabilities)	+78.7	+552.3	+400.8		+223.5	+598.6	+430.4	
Short-term capital (liabilities)	−90.6	+190.9	+104.8		−78.2	+182.2	+142.2	
2. Net compensatory foreign funds	+673.5	+268.4	+204.7		+512.4	+303.7	+274.1	
Deferred import payments	+58.8	−22.5	+69.8		+58.8	−22.5	+69.8	
Balance-of-payments loans	+220.5	+166.4	+37.3		+20.5	+199.7	+104.0	
Monetary authorities short-term liabilities	+390.1	−125.4	+168.0		+395.2	−123.4	+170.7	
Net IMF position	+4.1	+249.9	−70.4		+37.9	+249.9	−70.4	
III. Net domestic fund	+117.7	−438.7	−637.3		+135.8	−158.9	−457.5	
Private long-term capital (assests)	−128.4	−161.4	−399.8		+123.6	+35.0	−230.0	
Official long-term capital (assets)	−84.2	−142.9	−99.7		−75.9	−117.2	−88.6	
Short-term capital (assets)	+330.3	−134.4	−137.8		+335.3	−76.7	−138.9	
IV. Net errors and omissions	−417.7	−286.1	−308.6	−226.3	−5.7	−229.7	−282.5	−272.2
V. Net domestic funds and errors and omissions	−300.0	−724.8	−945.9		+130.1	−388.6	−740.0	
VI. Gross monetary reserves (increase −)	−47.2	+119.8	+462.9		−196.1	+91.1	+465.3	
Monetary authorities short-term assets	−274.8	+176.9	+222.8		−170.0	+148.2	+225.2	
Official monetary gold	+227.6	−57.1	+240.1		−26.1	−57.1	+240.1	

SOURCE: As for table 222.

[a] Estimates.

2. NON-COMPENSATORY OR AUTONOMOUS CAPITAL MOVEMENTS

(a) *Domestic and foreign autonomous capital movements*

The transactions recorded on the autonomous capital account are so varied in nature that they can be classified in different ways, viz., according to the behaviour of capital movements through time (short-term or long-term movements), the geographical origin of the funds (domestic or foreign capital), the legal and economic nature of the capital-exporting or importing agencies (public or private capital), and types of transfer payments (donations, long-term loans or direct investment).

It is unnecessary to examine the question of classification in the present report. All that need be done is to define the relative importance of autonomous movements of domestic capital, before studying in greater detail the autonomous foreign capital movements, which involve larger amounts.

Autonomous movements of domestic capital are those shown in tables 236 and 237 as movements of domestic funds without further specification, since compensatory movements of domestic capital (changes in the monetary authorities' gross gold and foreign exchange reserves) were classified separately in those tables. Such movements cover three groups of transactions:

(i) *Transactions giving rise to a change in the long-term assets held abroad by private individuals and enterprises (except foreign firms) resident in Latin America.*

These include direct investment abroad, and particularly portfolio investment, by the Latin American private sector. Their balance showed an increasing net outflow which rose from 128.4 million dollars in 1960 to 161.4 million in 1961 and to 399.8 million in 1962. But this movement is accounted for largely by Venezuela where the outflow of long-term private domestic capital, which had begun to expand after 1960, continued to rise steadily. If the figures for Venezuela are excluded, investment of private domestic capital abroad closed with a net outflow of 123.6 million dollars in 1960, a net inflow (repatriation of funds) of 35 million dollars in 1961 and an outflow of 230 million in 1962. However, these figures are not very significant, since a large proportion of new Latin American private investment abroad is recorded in the item net errors and omissions.[15]

(ii) *Transactions giving rise to a change in the long-term assets held abroad by Latin American governments (excluding the central monetary authorities)*

These are recorded almost in their entirety and consist essentially of new subscriptions by the governments of the region to non-monetary international organizations.[16] These transactions registered a net outflow of capital which rose from 84.2 million dollars for the region as a whole in 1960 to 142.9 million in 1961 and stood at 99.7 million dollars in 1962, because many of the Latin American countries had already paid their contributions to the new international institutions in previous years (International Development Association, International Finance Corporation and Inter-American Development Bank). Moreover, part of their contributions was paid in local currency that was not completely convertible; as a result the capital outflows represented by those contributions are partly compensated by offsetting entries under the short-term liabilities of Latin American governments abroad (excluding the central monetary authorities).

Table 238. Latin America: Net official donations, 1960–63

(*Millions of dollars*)

	Latin America (excluding Cuba)				*Latin America (excluding Cuba and Venezuela)*			
Year or period	*Net donations received by Latin American official sectors*	*Net donations granted to Latin America by United States official agencies*	*Net donations granted to Latin America by official institutions of OECD countries (other than United States) and Japan*	*Net donations received by Latin American official sectors from other sources and discrepancies (1−2−3)*	*Net donations received by Latin American official sectors*	*Net donations granted to Latin America by United States official agencies*	*Net donations granted to Latin America by official institutions of OECD countries (other than United States) and Japan*	*Net donations received by Latin American official sectors from other sources and discrepancies (5−6−7)*
	(*1*)	(*2*)	(*3*)	(*4*)	(*5*)	(*6*)	(*7*)	(*8*)
1960 .	+132.7	+78.3	+37.3	+17.1	+132.6	+78.2	+37.3	+17.1
1961 .	+140.6	+121.4	+40.3	−21.1	+140.4	+121.2	+40.3	−21.1
1962 .	+137.6	+124.8	+53.5	−40.7	+137.4	+122.6	+51.6	−36.8
1963[a] .	…	+132.3	…	…	…	+127.3	…	…
Average								
1956–60	+104.9	…	…	…	+104.8	…	…	…
1960–62	+137.0	+108.2	+43.7	−14.9	+136.8	+107.3	+43.1	−13.6

Source: As for table 222; United States Department of Commerce, *Foreign Grants and Credits*, 31 December 1960, 1961 and 1962; Organization for Economic Co-operation and Development, *The Flow of Financial Resources to Countries in Course of Economic Development in 1962*.

[a] Estimates.

(iii) *Transactions giving rise to a change in the short-term assets held abroad by private individuals and enterprises (except foreign firms) resident in Latin America, by commercial banks and by governments (excluding the central monetary authorities)*

These transactions primarily cover changes in the foreign assets of the private sector and commercial banks, since the foreign assets of the Latin American governments, which should not be considered as part of the monetary reserves, are negligible. The transactions in question represent a repatriation of foreign exchange amounting to 330.3 million dollars in 1960 and an increasing net outflow in 1961 (134.4 million) and 1962 (137.8 million). Nevertheless, these figures are not very representative because, although nearly all the changes in the assets of commercial banks are recorded, the same cannot be said of the changes in the private sector's assets abroad (see again tables 236 and 237).

Thus, as noted previously, the autonomous movements of domestic capital of all kinds registered in the balance of payments closed with a net inflow of 117.7 million dollars in 1960, and outflows of 438.7 and 637.3 million dollars in 1961 and 1962 respectively. Autonomous movements of foreign funds, on the other hand, consistently showed a net inflow of foreign exchange which represented 70 per cent of the total inflow of non-compensatory capital in 1960, and over 100 per cent of that inflow in 1961 (128.6 per cent) and 1962 (129.6 per cent).

Autonomous movements of foreign capital may be classified in four main categories according to the method of transfer: official donations; long-term loans; direct investment; and short-term transactions.

The data available on these flows, though generally more reliable than those relating to movements of domestic funds, vary greatly in value according to the category considered.

(b) *Official donations*

Official donations as defined by the International Monetary Fund are official transfer payments. They therefore include all transfer payments not involving a *quid pro quo* received from abroad by the public sector of the Latin American countries (credit), or transfer payments abroad made by that sector (debit), that is,

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[15] See page's 234-235 of this study.

[16] International institutions other than IMF.

Table 239. Latin America: Net official donations, by country, 1960–62

(*Millions of dollars*)

Country	*1960*				*1961*				*1962*[a]			
	Net donations received by Latin American official sectors	*Net donations granted to Latin America by United States official agencies*	*Net donations granted to Latin America by official institutions of OECD countries (other than United States) and Japan*[b]	*Net donations received by Latin American official sectors, from other sources and discrepancies (1−2−3)*	*Net donations received by Latin American official sectors*	*Net donations granted to Latin America by United States official agencies*	*Net donations granted to Latin America by official institutions of OECD countries (other than United States) and Japan*[b]	*Net donations received by Latin American official sectors, from other sources and discrepancies (5−6−7)*	*Net donations received by Latin American official sectors*	*Net donations granted to Latin America by United States official agencies*	*Net donations granted to Latin America by official institutions of OECD countries (other than United States) and Japan*[b]	*Net donations received by Latin America official sectors, from other sources and discrepancies (9−10−11)*
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*	*(10)*	*(11)*	*(12)*
Argentina	+0.6	+0.3	+0.7	−0.4	+1.2	+0.8	+0.2	+0.2	+1.7	+1.3	+0.7	−0.3
Bolivia	+12.8	+10.9	+1.4	+0.5	+22.3	+18.8	+2.9	+0.6	+21.4	+24.9	−4.9[c]	+1.4
Brazil	+17.0	+11.3	+2.0	+3.7	+16.0	+11.7	+2.6	+1.7	+37.0	+18.7	+19.1	−0.8
Chile	+44.8	+13.2	+7.7	+23.9	+30.0	+27.6	+7.0	−4.6	+19.3	+13.8	+3.7	+1.8
Colombia	+5.3	+5.5	+3.7	−3.9	+7.8	+9.7	+5.0	−6.9	+8.7	+15.0	+9.0	−15.3
Costa Rica	+3.3	+1.1	+2.9	−0.7	+5.2	+1.3	+3.7	+0.2	+2.6	+1.8	+1.2	−0.4
Dominican Republic	−0.1	+0.2	—	−0.3	−0.2	−0.1	—	−0.3	+3.1	+3.0	—	+0.1
Ecuador	+5.8	+3.0	+0.5	+2.3	+4.6	+4.7	+1.2	−1.3	+8.9	+4.5	+2.3	+2.1
El Salvador	+0.9	+0.9	+0.2	−0.2	+1.6	+1.2	—	+0.4	+2.5	+3.3	+1.3	−2.1
Guatemala	+14.5	+11.2	+2.1	+1.2	+15.0	+11.4	+3.2	+0.4	+8.3	+5.0	+3.0	+0.3
Haiti	+6.4	+6.3	+3.8	−3.7	+11.4	+13.1	—	−1.7	+2.5	+3.9	+0.9	−2.3
Honduras	+3.2	+2.2	+1.0	—	+5.0	+3.1	+2.2	−0.3	+3.9	+3.3	−0.1[c]	+0.7
Mexico	+1.6	+1.7	+2.4	−2.5	+1.4	+4.1	+2.4	−5.1	+1.5	+9.8	+7.2	−15.5
Nicaragua	+2.7	+1.1	+1.9	−0.3	+3.5	+1.7	+2.6	−0.8	+3.0	+2.6	+2.5	−2.1
Panama	+8.0	+1.7	+3.6	+2.7	+11.6	+3.1	+3.3	+5.2	+9.2	+4.4	+2.1	+2.7
Paraguay	+3.0	+2.5	+0.9	−0.4	+2.5	+3.2	+1.0	−1.7	+2.6	+2.5	−0.1[c]	+0.2
Peru	+2.1	+4.8	+2.5	−5.2	+1.5	+5.2	+3.0	−6.7	+1.2	+4.3	+2.8	−5.9
Uruguay	+0.7	+0.3	—	+0.4	0.0	+0.4	—	−0.4	...	+0.5	+0.9	...
Sub-total	+132.6	+78.2	+37.3	−17.1	+140.4	+121.2	+40.3	−21.1	+137.4	+122.6	+51.6	−36.8
Venezuela	+0.1	+0.1	—	—	+0.2	+0.2	—	—	+0.2	+2.2	+1.9	−3.9
TOTAL	+132.7	+78.3	+37.3	−17.1	+140.6	+121.4	+40.3	−21.1	+137.6	+124.8	+53.5	−40.7

SOURCE: As for table 238.

[a] Preliminary figures.

[b] Net donations granted to Latin America by the official institutions of OECD countries (other than the United States) and Japan, have been calculated from the difference between the net United States official grants to Latin America, as registered in the United States official agencies' annual reports, and the net grants of the official institutions of the OECD countries and Japan, as registered in the OECD annual reports.

[c] These negative figures are probably due to discrepancies between the figures respectively registered in the United States official agencies' annual reports and the OECD reports.

donations and obligatory transfers (for example, taxes paid to Latin American governments by individuals domiciled abroad).

The transactions thus recorded on the official donations account were consistently favourable to the region (see table 238). The surplus increased slightly between 1960 and 1961 from 132.7 million dollars to 140.6 million; it remained virtually unchanged in 1962, and possibly also in 1963. Altogether, the trend towards a steady long-term increase in the donations to Latin America's public sector, which had already been observed in 1956–60, continued in 1960–62. Net capital inflows under this head, which had averaged 104.9 million dollars annually in 1956–60, rose to 137.0 million in 1960–62.

Table 240. Latin America: Percentage distribution of net official donations by recipient country, 1960–62

Country	Net donations received by Latin American official sectors			Net donations granted to Latin America by United States official agencies			Net donations granted to Latin America by official institutions of OECD countries (other than United States) and Japan		
	1960	*1961*	*1962*	*1960*	*1961*	*1962*	*1960*	*1961*	*1962*
Argentina	0.5	0.8	1.2	0.4	0.8	1.1	1.9	0.5	1.3
Bolivia	9.6	15.9	15.6	13.9	15.4	20.1	3.7	7.3	−9.0
Brazil	12.8	11.4	26.9	14.4	9.8	15.1	5.4	6.4	35.7
Chile	33.8	21.3	14.0	16.9	22.7	11.1	20.6	17.4	6.9
Colombia	4.0	5.5	6.3	7.0	7.9	12.1	10.0	12.4	16.8
Costa Rica	2.5	3.7	1.9	1.4	1.1	1.4	7.8	9.3	2.2
Dominican Republic	−0.1	−0.1	2.3	0.3	0.1	2.4	—	—	—
Ecuador	4.4	3.3	6.5	3.8	3.9	3.6	1.3	3.0	4.3
El Salvador	0.7	1.1	1.8	1.2	1.0	2.6	0.5	—	2.4
Guatemala	10.9	10.7	6.0	14.3	9.4	4.1	5.6	7.9	5.6
Haiti	4.8	8.1	1.8	8.0	10.8	3.1	10.2	—	1.7
Honduras	2.4	3.5	2.8	2.8	2.5	2.6	2.7	5.4	−0.2
Mexico	1.2	1.0	1.1	2.2	3.4	7.8	6.4	5.9	13.4
Nicaragua	2.0	2.5	2.2	1.4	1.4	1.6	5.1	6.4	4.7
Panama	6.0	8.3	6.7	2.2	2.5	3.5	9.6	8.2	3.9
Paraguay	2.3	1.8	1.9	3.2	2.6	2.1	2.4	2.5	−0.2
Peru	1.6	1.1	0.9	6.1	4.3	3.4	6.8	7.4	5.2
Uruguay	0.5	—	...	0.4	0.3	0.5	—	—	1.8
Sub-total	99.9	99.9	99.9	99.9	99.9	98.2	100.0	100.0	96.5
Venezuela	0.1	0.1	0.1	0.1	0.1	1.8	—	—	3.5
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: As for table 238.

In order to determine the geographical origin of official donations, the figures for donations received by Latin America's public sector as shown in the region's balance of payments were compared with the figures for donations granted to Latin America by official agencies of the United States, of the other countries members of the Organization for Economic Co-operation and Development (OECD) and of Japan, as registered in the annual reports of the agencies concerned (see again table 238). This comparison is necessarily far from perfect, since a proportion of the donations granted to the region by such institutions may well have been channelled into Latin America's private sector whereas Latin America's official sector may have received donations from private institutions abroad. What it does show, however, is that the donations in question[17] increased considerably, whereas the discrepancies between the two series, on the one hand, and the figures on Latin America's balance of payments on the other, reflected a growing deficit. Hence, it must be concluded that an increasing proportion of the donations granted to the region by official institutions abroad was being absorbed by the Latin American private sector.

As regards the total donations granted to Latin America by the OECD countries (and Japan), it will be seen that approximately two thirds of the total (67.7 per cent in 1960, 75.1 per cent in 1961 and 70.0 per cent in 1962) were supplied by the United States and the rest by the other countries.

The geographical distribution of official donations among the recipient countries was very unequal (see tables 239 and 240). Three of them—Bolivia, Brazil and Chile—consistently absorbed 50 per cent or more of the total (56.2 per cent in 1960, 48.6 per cent in 1961 and 56.5 per cent in 1962). Other countries which received an appreciable proportion of these donations (5 per cent or more) at least during part of the period 1960–62, were Colombia, Ecuador, Guatemala, Haiti and Panama.

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[17] Donations from official United States agencies rose from 78.3 million dollars in 1960 to 121.4 million in 1961, 124.8 million in 1962 and about 132 million in 1963, that is, they went up by 68.5 per cent in three years. Donations from institutions of OECD countries (other than the United States) and of Japan climbed from 37.7 million dollars in 1960 to 40.3 million in 1961 and 53.5 million in 1962, i.e., an increase of 43.4 per cent in two years.

In spite of their sustained growth, official donations have constituted a relatively unimportant source of non-compensatory external financing for the region during the last few years. Although for Latin America as a whole (see table 241), they represented an increasing fraction of total autonomous capital inflows—16.4 per cent in 1960–62 as against 8.1 per cent in 1956–60—their evolution is accounted for rather by the non-compensatory capital outflows from Venezuela than by an increment in official donations. In fact, if Venezuela is excluded, a slight relative increase is noted over the long term in total autonomous capital inflows financed by donations, since they rose from 10.7 per cent in 1956–60 to 11.3 per cent in 1960–62.

Table 241. Latin America: Net official donations as percentage of net inflow of non-compensatory capital

Year or period	*Latin America (excluding Cuba)*	*Latin America (excluding Cuba and Venezuela)*
1960 . . .	15.5	11.3
1961 . . .	13.1	9.6
1962 . . .	23.7	13.9
1963[a] . . .	...	...
Average 1956–60 .	8.1	10.7
Average 1960–62 .	16.4	11.3

SOURCE: As for table 222.

[a] Estimates.

The relative importance of official donations varied greatly from one country to another. They played a very minor part in the larger countries like Argentina, Brazil and Mexico, which received a considerable amount of capital in the form of direct investment or long-term loans. On the other hand, they were the principal source of financing for some of the smaller countries—Bolivia, Ecuador, Guatemala, Haiti, Honduras, Panama and Paraguay—whose domestic markets are too restricted and export prospects not sufficiently promising to attract direct investment on a large scale, since their repayment capacity is very limited. Of the medium-size countries Chile has received substantial official donations in recent years—though on a decreasing scale—owing to special circumstances (reconstruction of the southern provinces affected by the earthquake in 1960).

(c) *Long-term loans and portfolio investment*

Long-term loans may be defined as capital transactions giving rise to reverse capital flows at the end of a term of more than one year, such as interest payments. Included in this category is portfolio investment, normally defined as issues of foreign securities not involving any control by the investors of the institutions responsible for issuing them. The investment consists either of bonds issued by governmental and non-governmental bodies, or of shares issued by private stock companies. In the first case, they are very similar to long-term loans, as the bonds are reimbursable according to a previously drawn-up plan and generally have a fixed rate of interest. The only difference lies in the nature of the instrument of negotiation (securities traded on the Stock Exchange instead of bank paper). In the second case, they are obviously very different, since no provision is made for the repayment of the capital, and dividends vary according to the success of the enterprise, its financial policy and other factors that it would be superfluous to mention here. However, transactions in the latter category are down to relatively low proportions in Latin America. It does not seem inexpedient, therefore, to place long-term loans and portfolio investment in the same category.

The transactions thus grouped together are so different in kind that a number of classifications are possible, on one or other of the following bases: length of amortization period; legal and administrative nature of the lending or borrowing agency (official and private loans by origin or destination); terms of repayment—loans repayable in the original currency (hard loans) or in the currency of the recipient country (soft loans); conditions attaching to the use of the funds (free loans and tied loans) and the main purpose of the loans.

From the latter standpoint three groups of transactions are distinguishable: development credits, suppliers' credits, and other long-term credit and portfolio investment.

(i) *Development credits*

At a first glance this concept may seem rather vague, since any long-term credits, even if devoted to the purchase of consumer goods, can indirectly lead to the supplementary importation of capital goods and thus help to increase the recipient country's stock of capital. Some loans are, however, more directly connected with the financing of investment projects or programmes, and it is for these that the term development loans should be reserved. They may be defined as long-term credits opened expressly to finance one or more specific projects or possibly a development programme. The lender exercises a certain amount of control over the use of the funds so as to ensure that they are employed for the purpose agreed upon.

Such credits, which are entirely public in origin, correspond in general to the non-compensatory loans from official sources recorded in tables 242 and 243. They do not correspond exactly, since the loans include something very similar to suppliers' credits (export credits from the Export–Import Bank (Eximbank)), while excluding what was probably a small amount of official European credit. The data available do not, however, permit a more accurate estimate to be made of the total development credits granted to Latin America in the last few years.

The transactions entered under the head of non-compensatory loans from official sources are characterized by an increasing flow of capital into the region in recent years (see again table 242). There were not only increments from one year to the next, but long-term increases as well. In all, these transactions reached an annual average of 377.8 million dollars for Latin America in 1960–63 as against 228.7 million in 1956–60, i.e., an increment of 65 per cent.

The loans in question came from two main sources: international institutions and United States official agencies. Net loans (disbursements less reimbursements) from non-monetary international institutions[18] climbed from 40.3 million dollars in 1960 to 292.3 million in 1963, that is, they increased sixfold (see again table 242). The International Bank for Reconstruction and Development consistently provided over two thirds of those funds, but the Inter-American Development Bank, which entered into operation in 1961, has been contributing an increasingly large amount ever since. Total non-compensatory long-term loans from public sources financed by international institutions dropped from 30.7 per cent in 1960 to 15.5 per cent in 1961 as a result of the notable expansion in financing by official United States agencies, but they rose again appreciably in 1962 and 1963 to 33.1 and 54.3 per cent respectively.

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[18] International financing agencies other than IMF.

Net loans (disbursements less reimbursements) from official United States agencies underwent fairly intensive fluctuations from one year to the next (see again table 242). They rose from 90.9 million dollars in 1960 to 351.7 million in 1961, only to fall to 285.2 million dollars in 1962 and 244.9 million in 1963.[19] Nevertheless, the level for the period 1960–63, which averaged 243.2 million dollars annually, was higher than in 1956–60 (175.3 million dollars).

The relative share of the various United States agencies as suppliers of funds to Latin America also underwent drastic changes. The Eximbank played an increasingly important role, while other United States aid programmes

Table 242. Latin America: Net non-compensatory long-term loans by main type, 1960–63

(*Millions of dollars*)

Year or period	*Net compensatory long-term loans received by Latin American official and private sectors*[a]	*Non-compensatory long-term loans from official sources*									*Guaranteed private export credits*[g]	*Otherlong term loans, portfolio investment and discrepancies (1 – 10 – 11)*
		International institutions				*United States official agencies*						
		IBRD[b]	*IDB*	*Other*[c]	*Total (2+3+4)*	*Exim-bank*[d]	*SPTF*[e]	*AID and other*[f]	*Total (6+7+8)*	*Total official (5+9)*		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*	*(10)*	*(11)*	*(12)*
					I. *Latin America (excluding Cuba)*							
1960 .	+297.9	+28.1	—	+12.2	+40.3	+44.4	—	+46.5	+90.9	+131.2	+226.1	−59.4
1961 .	+892.2	+54.6	+5.1	+5.1	+64.8	+208.4	+0.9	+142.4	+351.7	+416.5	+236.0	+239.7
1962 .	+710.3	+94.2	+35.9	+10.9	+141.0	+72.2	+21.4	+191.6	+285.2	+426.2	+126.7	+157.4
1963 .	...	+201.2	+73.7	+17.4	+229.3	−9.0	+64.9	+189.0	+244.9	+537.2	...	...
Average:												
1956–60	336.1	+48.6	...	+4.8	+53.4	+109.6	—	+65.7	+175.3	+228.7	...	+107.4
1960–62	633.5	+59.0	+13.7	+9.4	+82.1	+108.4	7.4	+126.8	+242.6	+324.7	+196.3	+112.5
1960–63	...	+94.5	+28.7	+11.4	+134.6	+79.0	21.8	+142.4	+243.2	+377.8	...	...
					II. *Latin America (excluding Cuba and Venezuela)*							
1960 .	+435.2	+28.1	—	+9.2	+37.3	+41.4	—	+46.5	+87.9	+125.2	+215.6	+94.4
1961 .	+935.3	+54.6	+4.3	+5.0	+63.9	+181.3	+0.9	+142.3	+324.5	+388.4	+239.6	+307.3
1962 .	+720.1	+21.8	+35.9	+10.9	+138.6	+19.3	+18.6	+189.5	+227.4	+366.0	+120.9	+233.2
1963 .	...	+187.9	+70.0	+17.6	+275.5	−14.4	+47.4	+180.7	+213.7	+489.2	...	...
Average:												
1956–60	325.3	...	...	...	...	...	...	...	...	...	...	...
1960–62	696.9	+58.2	+13.4	+8.4	+80.0	+80.7	+6.5	+126.1	+213.3	+293.3	+192.0	+211.6
1960–63	...	+90.6	+27.5	+10.6	+128.8	+56.9	+16.7	+139.7	+213.3	+342.1	...	...

SOURCES: As for table 222. International Bank for Reconstruction and Development, *Statement of Loans, 31 December 1959, 1960, 1961, 1962 and 1963*; Inter-American Development Bank, *Statement of Approved Loans, 31 December 1961, 1962, and 1963*; International Finance Corporation, *Statement of Operations, 31 December, 1959, 1960, 1961, 1962, and 1963*; International Development Association, *Statement of Development Credits, 31 December 1961, 1962 and 1963*; Export–Import Bank of Washington, *Statement of Loans and Authorized Credits, 31 December 1959, 1960, 1961, 1962 and 1963*; Social Progress Trust Fund, *Annual Reports 1961 and 1962 and Statement of Approved Loans, 31 December 1963*; United States Department of Commerce, *Foreign Grants and Credits 31 December, 1960, 1961 and 1962* and Agency for International Development, *Status of Loans Agreements, 31 December 1963*; Organization for Economic Co-operation and Development, *The Flow of Financial Resources to Countries in Course of Economic Development in 1962*.

[a] Covers all long-term loans to Latin American private and public sectors excluding balance-of-payments loans.

[b] Includes the loans sold to private participants with or without the guarantee of the Bank.

[c] Covers operations by IFC and IDA.

[d] Covers all Eximbank credits other than balance-of-payments loans. Includes funds disbursed through affiliated banks but excludes funds granted through other private participants at own risk.

[e] These operations of the Social Progress Trust Fund are handled by the Inter-American Development Bank.

[f] Covers American Aid Country Program Loans and loans previously listed as *Development Loan Fund Credit*, International Cooperation Administration credits, etc.; credits to governments and private firms under the Agricultural Trade Development and Assistance Act of 1955 (Public Law 480); and other credits for civilian use (sales of domestic surpluses, loans by the Institute of Inter-American Affairs, loans by the Reconstruction Finance Corporation, and prior grants converted into credits). Balance-of-payments loans are excluded as far as they are known (Development Loan Fund loan to Argentina of 3.3 million dollars in 1960 and of 7.2 million dollars in 1961; United States stabilization fund loan listed as AID loan to Brazil of 35 million dollars in 1961, 25 million dollars in 1962 and 14.5 million dollars in 1963.

[g] According to the OECD definition, this item covers the change in the amount of private export credits with maturities of over one year guaranteed by government agencies, which is an outstanding risk (i.e., progress payments are deducted).

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[19] These figures exclude net balance-of-payments loans from official United States sources. If these loans are added to the non-compensatory credits granted by official United States agencies, it will be seen that the total rose steeply between 1960 and 1961 from 41.6 million dollars to 535.9 million, but declined appreciably thereafter in 1962 and 1963 to 376.8 and only 219.9 million dollars respectively.

were intensified.[20] This shift in emphasis was due to the new policy of the United States authorities who now give preference to the aid programmes that are more directly connected with the implementation of development projects or programmes in recipient countries than the credits extended by the Eximbank, whose purpose, though it served in the past to finance development projects and programmes, is also to promote United States exports.

Table 243. Latin America: Percentage distribution of net non-compensatory long-term loans by main type, 1960–62

Year or period	*Non-compensatory long-term loans received by Latin American public and private sectors*	*Non-compensatory long-term loans from international institutions and United States official agencies*	*Guaranteed private export credits*	*Other long-term loans, investment and discrepancies*
I. *Latin America (excluding Cuba)*				
1960 .	100.0	44.0	75.9	−19.9
1961 .	100.0	46.7	26.4	26.9
1962 .	100.0	60.0	17.8	22.2
Average:				
1956–60	100.0	68.0	...	32.0
1960–62	100.0	51.2	31.0	17.8
II. *Latin America (excluding Cuba and Venezuela)*				
1960 .	100.0	28.8	49.5	21.7
1961 .	100.0	41.5	25.6	32.9
1962 .	100.0	50.8	16.8	32.4
Average:				
1956–60	...	...	...	...
1960–62	100.0	42.1	27.6	30.3

Source: As for table 242.

It is interesting to note that net non-compensatory loans from official United States agencies increased more slowly over the long term than those granted by international institutions, and that, as a result, their relative share in total net non-compensatory credits from official sources shrank from 76.7 per cent in 1956–60 to 64.4 per cent in 1960–63.

(ii) *Suppliers' credits*

These are long-term credits whose purpose is to promote the exports of the country granting them. They generally take the form of bank credits realizable by discount of bills of exchange drawn on foreign importers and callable at longer periods than short-term credits. The bills of exchange discounted by the commercial banks that open the credits are rediscounted first by public or private bodies in which the government participates, and possibly a second time by the central bank. In addition guarantees are given by special insurance companies with access to State financial resources.

In recent years, OECD has published statistics on the net movement of such credits based on changes in the current amount of guarantees at the end of the year. These statistics cover commercial credits granted by OECD countries other than the United States (i.e., the Western European countries and Canada) and Japan. They have a direct bearing on any study of Latin America's external financing, since they show the distribution of such credits among the recipient countries.

According to those statistics, net capital inflows under the head of suppliers' credits for Latin America as a whole increased from 226.1 to 236.0 million dollars between 1960 and 1961, but declined sharply to only 126.7 million dollars in 1962.[21]

Consequently, the relative importance of suppliers' credits for Latin America fluctuated sharply from one year to another, as may be noted when the net balance of these credits (disbursements less reimbursements) is calculated as a percentage of net capital inflows under the head of autonomous long-term loans of all kinds (see again table 243). This percentage was very high in 1960 (75.9 per cent for the region as a whole and 49.5 per cent if Venezuela is excluded) because net official loans were fairly low that year, and the transactions entered under other long-term loans and portfolio investment recorded a net outflow (i.e., reimbursements were higher than disbursements), or a small inflow if Venezuela is excluded from the regional total. This proportion declined drastically, however, in later years, shrinking to 26.4 per cent in 1961 and 17.8 per cent in 1962, as a result of the sharp increase in the inflow of capital in the form of official loans and other long-term loans and portfolio investment.

(iii) *Other autonomous long-term loans and portfolio investment*

The sum of the transactions classified under this head in table 242 was calculated as the difference between the total net inflow of capital entered in Latin America's balance of payments under the head of non-compensatory long-term loans, and net disbursements of funds recorded in the annual reports of international institutions, official agencies of the United States and of OECD under autonomous loans from official sources and suppliers' credits.

The amount includes transactions of a very varied nature, such as autonomous long-term loans from official sources other than those granted by United States agencies, that is, loans granted to the region by the Governments of Western Europe, Canada and Japan (excepting balance-of-payments loans); autonomous long-term loans from private United States sources or from private European, Canadian and Japanese sources (excluding in this case loans belonging to the category of guaranteed suppliers' credits); traditional portfolio investment; and a certain amount for errors and omissions resulting from probable discrepancies between the statistics of the Latin American borrowing countries and those of the lending agencies and countries. Although it is difficult to analyse the evolution of the series for other long-term loans and portfolio investment (see again table 242), transactions of this kind obviously constitute an increasing source of financing for the region. After closing the year 1960 with an outflow of

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[20] Eximbank's share of the net non-compensatory loans granted to Latin America by official United States sources, which had been 62.5 per cent in 1956–60, dropped to only 32.5 per cent in 1960–63.

[21] No data available for 1963.

59.4 million dollars,[22] they gave rise to an inflow of 239.7 million dollars in 1961, which was reduced to 157.4 million in 1962.[23]

It is impossible from the data available to impute this increment in capital inflows in the shape of other long-term loans and portfolio investment to specific groups of transactions. However, there are grounds for believing that it was due not so much to the very restricted resumption of portfolio investment[24] as to the increase in autonomous loans granted by European governments[25] and, above all, to private loans which do not come into the category of guaranteed suppliers' credits (see table 244).

The foregoing analysis of the different types of autonomous loans gives rise to a few general comments. In the first place, net inflows of capital in the form of non-compensatory long-term loans of all kinds underwent fairly sharp fluctuations from one year to another, increasing between 1960 and 1961, but dropping in 1962, and doubtless in 1963 as well. However, these inflows clearly took an upward course over the long term, since they mounted from an annual average of 336.1 million dollars in 1956–60 to 633.5 in 1960–62, i.e., they almost doubled between the two periods (see again table 242). As new direct investment accounted for a decreasing net inflow of funds into the region, net non-compensatory loans provided a growing proportion of the total net inflow of autonomous capital into Latin America (75.7 per cent in 1960–62 as against 26.0 per cent in 1956–60).

Secondly, the structure of the flow of non-compensatory long-term loans altered substantially. Private loans (guaranteed suppliers' credits, other long-term loans and direct investment)[26] came to represent an increasing proportion of the total autonomous loans received by the region: 50.6 per cent in 1960–62 as against 31.1 per cent in 1956–60. On the other hand, loans from official sources (granted by non-monetary international institutions and by official United States agencies) began to play a less important part, accounting for 51.9 per cent in 1960–62 as compared with 68.0 per cent in 1956–60 (see again table 244).

Thirdly, as regards total official loans, the contribution of United States agencies diminished, while that of international institutions augmented. The former financed only 64.4 per cent of the net disbursements made under the head of official loans to Latin America in 1960–63 as against 76.7 per cent in 1956–60. The latter, on the contrary, supplied 35.6 per cent in 1960–63 as compared with 23.3 per cent in 1956–60.

On the basis of the data available, it is impossible to determine the geographical origin of the non-compensatory long-term loans received by Latin America in the past year. It can, however, be determined to a certain extent with respect to all long-term loans received by the region, that is, including total balance-of-payments loans.

In table 244 the net compensatory and non-compensatory loans (disbursements less reimbursements) received by the Latin American public and private sectors are grouped in four categories: (1) net loans granted by non-monetary international institutions as registered in the annual reports of those agencies; (2) net loans granted by official United States agencies as recorded in their annual reports; (3) net official or private loans with government guarantee (suppliers' credits) granted by Western Europe, Canada and Japan, as calculated on the basis of OECD reports; and (4) a group of loans, not broken down by country of origin, covering balance-of-payments loans from private United States and European sources, non-compensatory loans from private United States and European sources not included in the category of guaranteed suppliers' credits, and traditional portfolio investment.

An increasing proportion of the net loans received by the region was financed by the United States in 1960–61, while the relative proportions financed respectively by international institutions and Western Europe declined. The reverse occurred between 1961 and 1962. Lastly, in the period 1960–62, the net credits disbursed by international agencies represented 10.5 per cent of the total long-term loans received by Latin America, net credits from the United States (official agencies only) 41.0 per cent, and those granted by Western Europe, Canada and Japan (from official sources or private sources with government guarantee only) 35.4 per cent. Moreover, it is impossible to classify by geographical origin 13.0 per cent of the net loans obtained by the region.

The distribution of autonomous long-term loans among the Latin American countries was very uneven during the period 1960–62, since three alone—Argentina, Brazil and Mexico—received 87.5 per cent of the regional total. However, the inequality is even more pronounced for private than for official loans. Thus the three countries in question obtained only 48.7 per cent of the regional total in respect of funds from international institutions and United States official agencies, 70 per cent of net suppliers' credits and over 100 per cent of other non-compensatory loans and portfolio investment, because of the considerable outflows against the last-named item registered in some countries (Venezuela).

(d) *Direct investment*

Direct investment consists of capital transfers to private concerns established in foreign countries, as a result of which those who remit the capital obtain a controlling interest in the companies concerned. This definition includes capital remitted from foreign countries as well as profits reinvested in the country concerned. These are entered twice in the Latin American balance of payments, once as an outflow under the

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[22] This outflow is almost entirely attributable to Venezuela which, in 1960, reimbursed a considerable sum in bonds originally issued on the domestic market but later sold abroad, particularly in the United States. If Venezuela is excluded, there was a net inflow of 94.4 million dollars.

[23] No data available for 1963.

[24] In the last four years only two Latin American countries were able to issue bonds on foreign stock markets. The Government of Argentina obtained 160 million dollars—20 million in 1960 and 140 million in 1961—through a private sale of securities abroad. The Government of Mexico successfully floated a loan of 40 million dollars on the New York Stock Exchange in July 1963.

[25] According to an estimate given in table 244, net loans granted to Latin America by the Governments of OECD member countries other than the United States and by Japan rose from 20.6 million dollars in 1960 to 56.3 million in 1961 and 156.2 million in 1962. An unknown though no doubt considerable proportion consists, however, of balance-of-payments loans.

[26] Including a small sum lent by official European sources.

Table 244. Latin America: Net long-term loans by main supplying area, 1960–62

(Millions of dollars)

Year or period	Total net long-term loans received by Latin America[a]	Net long-term loans from official or private sources guaranteed by the government of the lending country					Other long-term loans not discriminated by lending country (1−2−3−6)
				Western Europe, Canada and Japan			
		International institutions[b]	United States[c]	Guaranteed private export credits[d]	Net bilateral loans[e]	Total (4+5)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
I. *Latin America (excluding Cuba)*							
1960 .	+518.4	+40.3	+41.6	+226.1	+20.6	+246.7	+189.8
1961 .	+1,058.6	+64.8	+535.9	+236.0	+56.3	+292.3	+165.6
1962 .	+747.6	+141.0	+376.8	+126.7	+156.2	+282.9	−53.1
	+2,324.6	+246.1	+954.3			+821.9	+302.3
Average							
1960–62	774.9	82.0	318.1	+196.3	+77.7	274.0	100.8
II. *Latin America (excluding Cuba and Venezuela)*							
1960 .	+455.7	37.3	+46.6	+215.6	+22.9	+238.5	+133.3
1961 .	+1,135.0	63.9	+508.7	+239.6	+74.5	+314.1	+248.3
1962 .	+824.1	138.6	+319.0	+129.9	+146.7	+276.6	+89.9
Average							
1960–62	804.9	79.9	291.4	+195.0	+81.4	276.4	157.2

SOURCE: As for table 242.

[a] This item covers the net non-compensatory long-term loans received by Latin American official and private sectors plus net balance-of-payments loans as registered in the Latin American balance of payments.

[b] Covers net long-term loans granted to Latin America by non-monetary international institutions (IBRD, IDB, IFC and IDA).

[c] Covers long-term loans granted by United States official agencies to Latin America including balance-of-payments loans.

[d] Covers private export credits guaranteed by OECD countries (other than the United States) and Japan as registered in the OECD annual reports.

[e] Covers the net inflow of loans (repayable in recipient's or lender's currencies) into Latin America from OECD countries (other than the United States) and Japan. This net inflow has been calculated by comparison between (1) the net inflow of loans from OECD countries and Japan as registered in the OECD reports, and (2) the net inflow of loans from United States official agencies as registered in the annual reports of these agencies. The OECD series covering net loans excludes loans financed by the sale of United States agricultural surpluses (Public Law 480). In order to obtain a comparable series from United States official agencies it was necessary to exclude the net loans financed by the sale of United States agricultural surpluses.

Table 245. Latin America: Direct investment, 1960–63

(Millions of dollars)

Year or period	Latin America (excluding Cuba)					Latin America (excluding Cuba and Venezuela)				
	Total	Direct United States investment			Direct[a] investment from other sources and discrepancies (1−4)	Total	Direct United States investment			Direct[a] investment from other sources and discrepancies (6−9)
		Net capital inflow	Undistributed earnings of subsidiaries	Total (2+3)			Net capital inflow	Undistributed earnings of subsidiaries	Total (7+8)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1960 .	+399.3	+95.0	+214.0	+309.0	+90.3	+544.5	+245.0	+155.0	+400.0	+144.5
1961 .	+288.9	+172.0	+255.0	+427.0	−138.1	+359.3	+172.0	+218.0	+390.0	−30.7
1962 .	+265.2	−32.0	+287.0	+255.0	+10.2	+449.6	+162.0	+258.0	+420.0	+29.6
1963 .	...	+78.0	...	...	...	...	+92.0	...	...	...
Annual average										
1956–60	+850.9	...	...	+578.4	+272.5	+537.2	...	...	+289.4	+247.8
1960–62	+317.8	+78.3	+252.0	+330.3	−12.5	+451.1	+193.0	+210.3	+403.3	+47.8

SOURCE: As for table 222; United States, Department of Commerce, *Survey of Current Business*, various issues.

[a] The figures under this heading give only a rough idea of the amount of new direct investment proceeding from sources other than the United States because of the discrepancies of coverage between the IMF Balance of Payments series and the United States Department of Commerce series.

head of financial services for current transactions and again as an inflow of long-term non-compensatory capital under the heading of direct investment on capital account.

Thus defined, the rate of direct investment inflows has been substantially reduced over the past few years (see table 245), as is obvious even from the annual variations. The total for Latin America decreased from 399.3 million dollars in 1960 to 288.9 million in 1961 and 265.2 million in 1962, a drop of 33 per cent in two years. Venezuela is partly responsible for the reduction because of its net outflow in respect of direct investment in the petroleum sector, but, even if this country is excluded from the total, direct investment would still show a considerable drop between 1960 and 1961 (from 544.5 million dollars to 359.3 million) and, although recovering somewhat in 1962 (to 449.6 million), it failed to regain its 1960 level.[27]

Over the long term, there is obviously a tendency for less direct investment capital to enter Latin America, regardless of whether Venezuela is included or not. If it is, the annual average dropped from 850.9 million dollars in 1956–60 to 317.8 million in 1960–62—a reduction of 63 per cent. If not, the annual average declined from 537.2 million in 1956–60 to 451.1 million in 1960–62, i.e., 16 per cent.

The reduction in the inflow of direct investment capital is disquieting since it tends to combat the favourable effect of the increase in the net inflow of long-term non-compensatory loans. Although this increase amounted to 297 million annually for the region as a whole between 1956–60 and 1960–62, it was more than offset by the average drop in the inflow of direct investment (533 million annually). Venezuela was chiefly responsible for this state of affairs, but even if this country is excluded, the reduction in the direct investment inflow was sufficient to wipe out 25 per cent of the increase in net non-compensatory loans to Latin America.

As a result, the share of direct investment in the autonomous financing of Latin America shrank appreciably over the long term (from 65.8 per cent in 1956–60 to 38.0 per cent in 1960–62 for the region as a whole, and from 54.8 per cent to 37.4 per cent if Venezuela is excluded), whereas the share of long-term net loans increased.

It is difficult to determine the extent to which the decline in the inflow of direct investment capital can be attributed to United States companies or to other foreign concerns set up in Latin America, because there is virtually no information on the geographical origin of new direct investment, and the balances of payments compiled by the International Monetary Fund on the basis of figures supplied by official Latin American sources throw no light on this point. On the other hand, the United States Department of Commerce publishes statistics on exports of capital by United States companies to their subsidiaries and branches in Latin America, as well as data on the distributed and undistributed profits of subsidiaries. In principle, the flow of direct investment from areas other than the United States (mainly Western Europe and, to a lesser extent, Japan) can be calculated as the difference between the Latin American balance-of-payments series and those of the Department of Commerce, although the result would have little meaning in view of the wide discrepancies between the two series.

Nevertheless, if the evolution of the two series is compared over the long term, two observations can be made (see again table 245):

Table 246. Latin America: Direct investment by country, 1960–62
(*Millions of dollars*)

Country	*1960*	*1961*	*1962*
Argentina	+332.0	−18.2	+71.8
Bolivia	+16.5	+11.4	+10.1
Brazil	+138.0	+147.0	+136.0
Chile	+29.0	+51.9	+39.9
Colombia	+2.5	+1.1	+0.4
Costa Rica	+2.4	+7.7	+12.1
Dominican Republic	−3.9	−3.6	+4.3
Ecuador	+8.0	+8.4	+3.4
El Salvador	+4.5	+3.1	+7.2
Guatemala	+16.8	+7.6	+9.3
Haiti	+0.1	+0.5	+1.2
Honduras	−7.6	−7.5	−1.0
Mexico	−38.1	+119.3	129.6
Nicaragua	+1.7	+6.0	+5.4
Panama	+32.4	+10.2	+12.1
Paraguay	+3.6	+1.3	+1.9
Peru	+6.6	+13.1	+5.9
Uruguay	—	—	—
Sub-total	+544.5	+359.3	+449.6
Venezuela	−145.2	−70.4	−184.4
TOTAL	+399.3	+288.9	+265.2

Source: As for table 222.

1. For the region as a whole, the direct investment outflow from the United States to Latin America declined from an annual average of 578.4 million dollars in 1956–60 to 330.3 million in 1960–62. However, the reduction in the total inflow of direct investment capital recorded in the Latin American balance of payments was even greater. There was apparently some repatriation of direct investment capital to the European countries.

2. If Venezuela is excluded, the flow of direct investment from the United States augmented from an annual average of 289.4 million dollars in 1956–60 to 403.3 million in 1960–62. During the same period, there was a substantial contraction in the total inflow of direct investment recorded on the region's balance of payments, which was exclusively attributable to the Western European countries and Japan. In point of fact, the

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[27] What happened in 1963 is difficult to determine at the moment, since data on total capital inflows into Latin America in the form of direct investment are lacking. The only figures available relate to the fresh influx of capital from the United States, hitherto no more than a small part of direct United States investment in the region, most of which is financed by undistributed profits. The figures show that in 1963 Latin America received from the United States an additional 178 million dollars in capital as against an outflow of 32 million dollars in 1962 for the region as a whole. With Venezuela excluded, the regional total dropped from 162 million in 1962 to 92 million in 1963.

conclusions reached on the evolution of direct investment from Europe and Japan cannot be more than assumptions because the data are incomplete.

The distribution of new direct investment among the Latin American countries in 1960–62 was much the same as in 1956–60 (see tables 246 and 247). Most of the investment capital went to three countries—Argentina, Brazil and Mexico—which constitute large, relatively integrated, markets and as such provide interesting possibilities for the development of manufacturing industries financed by foreign capital. Of the remaining countries, only Chile received a fairly high percentage of the regional total, because of relatively favourable prospects in its export sector. The rest were given only a very small share of the total, and some even registered a net repatriation of direct foreign investment (e.g., the Dominican Republic, Honduras and Venezuela).

Table 247. Latin America: Percentage distribution of direct investment by recipient country, 1960–62

Country	*1960*	*1961*	*1962*
Argentina	83.1	−6.3	27.1
Bolivia	4.1	3.9	3.8
Brazil	34.6	50.9	51.3
Chile	7.3	18.0	15.0
Colombia	0.6	0.4	0.2
Costa Rica	0.6	2.7	4.6
Dominican Republic	−1.0	−1.2	1.6
Ecuador	2.0	2.9	1.3
El Salvador	1.1	1.1	2.7
Guatemala	4.2	2.6	3.5
Haiti	—	0.2	0.4
Honduras	−1.9	−2.6	−0.4
Mexico	−9.5	41.3	48.9
Nicaragua	0.4	2.1	2.0
Panama	8.1	3.5	4.6
Paraguay	0.9	0.4	0.7
Peru	1.7	4.5	2.2
Uruguay	—	—	—
Sub-total	136.3	124.4	169.5
Venezuela	−36.3	−24.4	−69.5
TOTAL	100.0	100.0	100.0

SOURCE: As for table 242.

The most striking difference between the pattern of distribution in 1960–62 and in the five-year period 1956–60 is the change in Venezuela's relative position. This country, which in 1956–60 received 35 per cent of the total net direct investment channelled into Latin America, registered substantial outflows in 1960, 1961 and 1962. This can be explained by the fact that the influx of fresh foreign capital into the petroleum companies has virtually ceased since 1960 and that, on the contrary, the companies concerned have transferred part of their reserves to their parent bodies.

(e) *Short-term loans*

Short-term movements are those which induce—or may induce—inverse flows within a period of one year or less. The autonomous short-term movements financed by domestic funds, i.e., the movements which lead to a change in Latin America's short-term foreign assets, have already been analysed. What must now be examined are the autonomous short-term movements financed by foreign funds, i.e., those which bring about a change in the region's short-term foreign liabilities. The relevant transactions can be classified into three main groups:

(i) *Transactions leading to a change in the short-term foreign liabilities of the Latin American private sector*

These transactions relate essentially to the disbursement and reimbursement of short-term credits obtained from foreign banks or exporters by Latin American importers in order to finance their purchases abroad. Short-term fluctuations were violent, a net outflow of 170.3 million dollars being registered in 1960, an inflow of 54.8 million in 1961, and another small outflow of 15.2 million in 1962 (see table 248).

(ii) *Transactions leading to a change in the short-term foreign liabilities of Latin American commercial banks*

These transactions cover drawings and repayments in respect of short-term foreign credits granted to commercial banks in the region (credits opened by foreign banks in favour of their branches in Latin America, credit lines extended to banks in the region by their agents abroad, acceptance by Latin American banks of bills of exchange drawn by foreign exporters, and so forth). These transactions consistently registered a small credit balance in favour of the region (23.3 million dollars in 1960–62, 48.2 million in 1961 and 35.5 million in 1962). Consequently, the short-term debt of the region's commercial banks increased along with that of the private sector, but to a moderate extent.

(iii) *Transactions leading to a change in the short-term foreign liabilities of the Latin American Governments (excluding the central monetary authorities)*

This category applies essentially to changes in the short-term liabilities of the Latin American governments, including, on the one hand, the liabilities forming the contra-entry to payments of subscriptions to non-monetary international institutions in local currency and, on the other hand, liabilities deriving from the United States agricultural aid programme (Public Law 480), by virtue of which United States agricultural surpluses can be sold abroad for non-transferable local currency. The product of these sales is held by the purchasing country at the disposal of the United States authorities to finance their own expenditure or long-term loans (soft loans) to the private sector. For a time this system led to an increase in the short-term liabilities, vis-à-vis the United States, of the government (rather than of the central bank) of the country that had purchased the surpluses.

As is only to be expected, the short-term foreign liabilities of the Latin American governments increased steadily in the last few years (by 56.4 million dollars in 1960, 87.9 million in 1961 and 84.5 million in 1962), since the countries of the region made further contributions in local currency to non-monetary international institutions and, in addition, received a substantial amount of aid in the form of agricultural surpluses. The considerable delay ordinarily involved in using the product of the sales of such surpluses to finance long-term loans resulted in a backlog of short-term liabilities under this head.

If all autonomous short-term transactions financed by foreign funds are considered as a whole, that is, all those which lead to a change in the short-term liabilities of the private sector (excluding deferred import payments), of commercial banks and of governments (excluding the central monetary authorities), it will be observed that the balance of such transactions fluctuated violently from one year to the next (a net outflow of 90.6 million dollars in 1960 being followed by a net inflow of 190.9 million in 1961 and a fresh net outflow of 104.8 million in 1962). These fluctuations are, however, attributable to changes in short-term liabilities.

Table 248. Latin America: Non-compensatory short-term capital, 1960–62

(*Millions of dollars*)

	1960			*1961*			*1962*		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
A. *Latin America* (*excluding Cuba*)									
1. Short-term liabilities	*303.1*	*393.7*	*−90.6*	*312.5*	*121.6*	*+190.9*	*269.2*	*164.4*	*+104.8*
Private	189.5	359.8	−170.3	130.5	75.7	+54.8	111.3	126.5	−15.2
Commercial banks	43.6	20.3	+23.3	83.5	35.3	+48.2	72.4	36.9	+35.5
Official institutions other than monetary authorities	70.0	13.6	+56.4	98.5	10.6	+87.9	85.5	1.0	+84.5
2. Short-term assests	*415.4*	*85.1*	*+330.3*	*83.9*	*218.3*	*−134.4*	*115.3*	*253.1*	*−137.8*
Private	318.0	71.3	+246.7	69.8	110.8	−41.0	62.3	191.7	−129.4
Commercial banks	97.4	13.5	+83.9	11.3	107.5	−96.2	51.1	61.4	−10.3
Official institutions other than monetary authorities	—	0.3	−0.3	2.8	—	+2.8	1.9	—	+1.9
3. Total (1+2)	*718.5*	*478.8*	*+239.7*	*396.4*	*339.9*	*+56.5*	*384.5*	*417.5*	*−33.0*
B. *Latin America* (*excluding Cuba and Venezuela*)									
1. Short-term liabilities	*296.9*	*375.1*	*−78.2*	*285.8*	*103.6*	*+182.2*	*257.9*	*115.7*	*+142.2*
Private	189.5	352.5	−163.0	130.5	57.7	+72.8	111.3	77.8	+33.5
Commercial banks	43.6	9.0	+34.6	78.6	35.3	+43.3	66.7	36.9	+29.8
Official institutions other than monetary authorities	63.8	13.6	+50.2	76.7	10.6	+66.1	79.9	1.0	+78.9
2. Short-term assets	*405.4*	*70.1*	*+335.3*	*83.9*	*160.6*	*−76.7*	*113.6*	*252.5*	*−138.9*
Private	318.0	56.3	+261.7	69.8	65.0	+4.8	62.3	191.1	−128.8
Commercial banks	87.4	13.5	+73.9	11.3	95.6	−84.3	49.4	61.4	−12.0
Official institutions other than monetary authorities	—	0.3	−0.3	2.8	—	+2.8	1.9	—	+1.9
3. Total (1+2)	*702.3*	*445.2*	*+257.1*	*369.7*	*264.2*	*+105.5*	*371.5*	*368.2*	*+3.3*

SOURCE: As for table 222.

3. COMPENSATORY FINANCING

If an examination is made of the annual changes in the balance-of-payments deficit before compensatory financing, the results will differ considerably according to whether or not the figures for Venezuela are included. If they are, the balance-of-payments deficit and, consequently, the volume of compensatory financing, fluctuated sharply from year to year, shrinking between 1960 and 1961 (from 626.3 to 388.2 million dollars), and expanding to 667.6 million in 1962. If Venezuela is excluded, the deficit before compensation rose progressively (from 316.3 million dollars in 1960 to 394.8 million in 1961 and 739.4 million in 1962), thereby compelling the Latin American countries to call increasingly upon compensatory sources of financing.

However, if the long-term evolution of the balance-of-payments deficit is considered rather than its annual fluctuations, the disequilibrium in Latin America's external payments is accentuated after 1960 whatever the geographical definition of the region. According to the method adopted by ECLA, the degree of disequilibrium can be measured by calculating the percentage of the deficit on current account that is financed by compensatory transactions, or, in other words, the sum of compensatory transactions as a percentage of the total net inflow of capital. It thus becomes apparent that such transactions financed 53 per cent of the deficit on current account in 1960–62, as compared with 19.9 per cent in 1956–60. The trend remains the same if Venezuela is eliminated from the regional total, the proportion of the current deficit covered by compensatory financing then increasing from 19.3 per cent in 1956–60 to 31.9 per cent in 1960–62.

In 1963 the change in external payments seems to have favoured the region. The decrease in the deficit on current account that year was such that, despite a reduction in the inflow of autonomous capital, a surplus was recorded on the balance of payments before compensation (299.7 million dollars for the region as a whole and 111.4 million if Venezuela is excluded). The existence of this surplus should, however, be regarded with a good deal of reserve, as the data available for that year on

Table 249. Latin America: Foreign exchange reserves, changes in liabilities, 1960–62
(*Millions of dollars*)

Country	*1960*			*1961*			*1962*		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
Argentina	0.1	11.4	−11.3	0.2	—	+0.2	—	2.3	−2.3
Bolivia	—	0.5	−0.5	—	0.6	−0.6	—	0.6	−0.6
Brazil	342.0	—	+342.0	—	159.0	−159.0	137.0	32.0	+105.0
Chile	26.9	1.2	+25.7	—	18.5	−18.5	—	4.8	−4.8
Colombia	—	1.3	−1.3	0.3	—	+0.3	—	0.1	−0.1
Costa Rica	—	—	—	—	—	—	—	—	—
Dominican Republic	—	—	—	—	—	—	1.9	—	+1.9
Ecuador	0.8	—	+0.8	3.9	3.2	+0.7	—	5.1	−5.1
El Salvador	3.0	0.2	+2.8	0.6	0.8	−0.2	0.3	2.1	−1.8
Guatemala	3.0	0.4	+2.6	6.4	1.5	+4.9	9.0	3.6	+5.4
Haiti	0.3	0.6	−0.3	—	—	—	1.1	—	+1.1
Honduras	0.3	—	+0.3	1.0	—	+1.0	0.2	0.2	—
Mexico	7.5	—	+7.5	6.5	2.8	+3.7	7.0	—	−7.0
Nicaragua	0.4	—	+0.4	2.7	—	+2.7	0.8	0.1	+0.7
Panama	—	—	—	—	—	—	—	—	—
Paraguay	0.1	—	+0.1	0.4	—	+0.4	—	0.7	−0.7
Peru	—	—	—	—	—	—	—	—	—
Uruguay	26.4	—	+26.4	41.0	—	+41.0	65.0	—	+65.0
Sub-total	410.8	15.6	+395.2	63.0	186.4	−123.4	222.3	51.6	+170.7
Venezuela	—	5.1	−5.1	—	2.0	−2.0	—	2.7	−2.7
TOTAL	410.8	20.7	+390.1	63.0	188.4	−125.4	222.3	54.3	+168.0

SOURCE: As for table 222.

Table 250. Latin America: Foreign exchange reserves, changes in assets (increase —), 1960–62
(*Millions of dollars*)

Country	*1960*			*1961*			*1962*		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
Argentina	0.7	259.0	−258.3	287.1	—	+287.1	177.1	—	+177.1
Bolivia	5.4	0.1	+5.3	0.5	0.5	—	5.4	—	+5.4
Brazil	—	31.0	−31.0	—	143.0	−143.0	45.0	—	+45.0
Chile	20.1	—	+20.1	42.2	—	+42.2	—	9.9	−9.9
Colombia	70.9	1.5	+69.4	14.6	0.5	+14.1	24.1	1.3	+22.8
Costa Rica	1.3	—	+1.3	5.8	—	+5.8	—	5.9	−5.9
Dominican Republic	12.0	—	+12.0	9.4	—	+9.4	—	11.7	−11.7
Ecuador	2.7	0.3	+2.4	—	2.1	−2.1	4.2	9.2	−5.0
El Salvador	4.3	0.1	+4.2	0.2	4.1	−3.9	1.2	—	+1.2
Guatemala	—	10.0	−10.0	—	1.2	−1.2	4.9	—	+4.9
Haiti	—	0.9	−0.9	—	1.4	−1.4	3.2	—	+3.2
Honduras	2.6	3.5	−0.9	1.6	—	+1.6	—	1.2	−1.2
Mexico	10.0	0.1	+9.9	0.3	40.1	−39.8	13.1	—	+13.1
Nicaragua	0.9	0.7	+0.2	—	4.6	−4.6	—	3.8	−3.8
Panama	—	—	—	—	—	—	—	—	—
Paraguay	2.9	—	+2.9	0.5	2.0	−1.5	1.7	—	+1.7
Peru	4.5	6.4	−1.9	—	28.7	−28.7	—	5.6	−5.6
Uruguay	5.3	—	+5.3	14.2	—	+14.2	—	6.1	−6.1
Sub-total	143.6	313.6	−170.0	376.4	228.2	+148.2	279.9	54.7	+225.2
Venezuela	—	104.8	−104.8	28.7	—	+28.7	33.3	35.7	−2.4
TOTAL	143.6	418.4	−274.8	405.1	228.2	+176.9	313.2	90.4	+222.8

SOURCE: As for table 222.

Table 251. Latin America: Foreign exchange reserves, changes in net IMF position, 1960–62
(*Millions of dollars*)

Country	*1960*			*1961*			*1962*		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
Argentina	48.5	—	+48.5	31.0	—	+31.0	—	9.0	−9.0
Bolivia	—	1.3	−1.3	—	2.0	−2.0	1.3	—	+1.3
Brazil	145.0	130.0	+15.0	40.0	—	+40.0	—	18.0	−18.0
Chile	—	12.4	−12.4	78.1	25.0	+53.1	—	12.7	−12.7
Colombia	3.8	25.0	−21.2	65.0	—	+65.0	7.5	—	+7.5
Costa Rica	0.4	0.5	−0.1	14.6	9.5	+5.1	—	4.1	−4.1
Dominican Republic	9.0	—	+9.0	—	—	—	—	—	—
Ecuador	—	—	—	14.0	—	+14.0	—	2.2	−2.2
El Salvador	5.8	—	+5.8	—	3.2	−3.2	—	8.0	−8.0
Guatemala	—	—	—	—	—	—	5.0	—	+5.0
Haiti	—	1.3	−1.3	—	1.3	−1.3	0.9	—	+0.9
Honduras	3.5	3.0	+0.5	1.3	—	+1.3	1.3	—	+1.3
Mexico	—	—	—	45.0	—	+45.0	—	45.0	−45.0
Nicaragua	—	—	—	4.5	—	+4.5	—	—	—
Panama	—	—	—	—	—	—	—	—	—
Paraguay	1.1	1.3	−0.2	—	2.0	−2.0	—	1.8	−1.8
Peru	1.9	2.5	−0.6	1.9	2.5	−0.6	1.9	2.5	−0.6
Uruguay	22.2	26.0	−3.8	0.3	0.3	—	15.0	—	+15.0
Sub-total	241.2	203.3	+37.9	295.9	45.8	+249.9	32.9	103.3	−70.4
Venezuela	101.2	135.0	−33.8	—	—	—	—	—	—
TOTAL	342.4	338.3	+4.1	295.7	45.8	+249.9	32.9	103.3	−70.4

SOURCE: As for table 222.

Table 252. Latin America: Changes in official monetary gold (increase —), 1960–62
(*Millions of dollars*)

Country	*1960*			*1961*			*1962*		
	Credit	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*	*Credit*	*Debit*	*Balance*
Argentina	—	47.4	−47.4	—	86.1	−86.1	129.0	—	+129.0
Bolivia	—	—	—	—	—	—	—	2.0	−2.0
Brazil	40.0	—	+40.0	2.0	—	+2.0	60.0	—	+60.0
Chile	—	3.5	−3.5	—	2.8	−2.8	5.0	—	+5.0
Colombia	—	7.2	−7.2	—	10.2	−10.2	30.8	—	+30.8
Costa Rica	—	—	—	—	—	—	—	—	—
Dominican Republic	0.1	—	+0.1	7.4	—	+7.4	—	—	—
El Salvador	0.4	—	+0.4	12.1	—	+12.1	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—
Haiti	—	—	—	—	—	—	—	—	—
Honduras	—	—	—	—	—	—	—	—	—
Mexico	5.6	—	+5.6	24.5	—	+24.5	17.3	—	+17.3
Nicaragua	—	0.1	−0.1	0.2	—	+0.2	—	0.2	−0.2
Panama	—	—	—	—	—	—	—	—	—
Paraguay	—	—	—	—	—	—	—	—	—
Peru	—	14.4	−14.4	—	5.0	−5.0	—	—	—
Uruguay	—	—	—	—	—	—	—	—	—
Sub-total	46.5	72.6	−26.1	47.0	104.1	−57.1	242.3	2.2	+240.1
Venezuela	253.7	—	+253.7	—	—	—	—	—	—
TOTAL	300.2	72.6	+227.6	47.0	104.1	−57.1	242.3	2.2	+240.1

SOURCE: As for table 250.

the region's external payments are only approximate and very fragmentary.

As in previous years, compensatory movements were sustained by means of deferred import payments, balance-of-payments loans or drawings on the gold and foreign exchange holdings of the monetary authorities.

Deferred import payments have not played an important part in the last few years. The amounts entered against this balance-of-payments item are small and involve Brazil and Colombia only. In the case of Brazil, a certain amount for deferred payments (a net inflow of 203.0 million dollars in 1960, a net outflow of 75.0 million the following year and a net inflow of 188.0 million in 1962) was not entered under that head, but included among the short-term liabilities of the central monetary authorities, since such were considered to be claims upon those authorities.

Table 253. Latin America: Changes in net monetary reserves[a] (increase—)
(*Millions of dollars*)

Country	*1960*	*1961*	*1962*	*Aggregate total 1960–62*
Argentina	−268.5	+232.2	+294.8	+258.5
Bolivia	+3.5	−2.6	+4.1	+5.0
Brazil	+366.0	−260.0	+192.0	+298.0
Chile	+29.9	+74.0	−22.4	+81.5
Colombia	+39.7	+69.2	+61.0	+169.9
Costa Rica	+1.2	+10.9	−10.0	+2.1
Dominican Republic	+21.1	+16.8	−9.8	+28.1
Ecuador	+3.6	+13.4	−12.1	+4.9
El Salvador	+13.2	+4.8	−8.6	+9.4
Guatemala	−7.4	+3.7	+15.3	+11.6
Haiti	−2.5	−2.7	+5.2	0.0
Honduras	−0.1	+3.9	+0.1	+3.9
Mexico	+23.0	+33.4	−7.6	+48.8
Nicaragua	+0.5	+2.8	−3.3	0.0
Panama	—	—	—	—
Paraguay	+2.8	−3.1	−0.8	−1.1
Peru	−16.9	−34.3	−6.2	−57.4
Uruguay	+27.9	+55.2	+73.9	+157.0
Sub-total	+237.0	+217.6	+565.6	+1,020.2
Venezuela	+110.0	+26.7	−5.1	+131.6
Total	+347.0	+244.3	+560.5	+1,151.8

Sources: As for tables 222, 242 and 250.

[a] This item covers short-term liabilities and assets, net IMF position and official monetary gold of the central monetary authorities.

Balance-of-payments loans consistently showed a net inflow into the region, with, however, a downward trend: from 220.5 million dollars in 1960 they dropped to 166.4 million in 1961 and to 37.3 million the following year. In 1963 repayments apparently exceeded drawings. In addition, eight countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic and Peru) did not effect international transactions under the head of balance-of-payments loans until after 1960.

In these circumstances, monetary reserves constituted the main source of compensatory financing. These reserves can, of course, be defined in either gross or net terms. In gross terms they are equal to the total sum of the central monetary authorities' liquid foreign assets. In net terms they are equal to the sum of those assets less the central monetary authorities' short-term foreign liabilities.

The movement of net reserves therefore includes changes in the following: official gold reserves of the central monetary authorities; their official foreign exchange reserves; their short-term liabilities to the central monetary authorities of other countries; their credit or debit balances within the context of bilateral payments agreements; their net IMF position, and their liquid liabilities or assets in respect of private banks and individuals in other countries (including swaps).

Monetary reserves thus defined plainly followed a downward trend from 1960 to 1962 (see tables 249, 250, 251 and 252). For the region as a whole they dropped by 347.0 million dollars in 1960, 244.3 million in 1961 and 560.5 million in 1962. Latin America's net losses in reserves were therefore over 1,150 million dollars in three years (1,151.8 million). If the figures for Venezuela are excluded from the regional total, the trend does not alter substantially, total losses being about 1,000 million dollars in 1960–62. Since reserves had already begun to sink in 1958,[28] the region's losses over the five years from 1958 to 1962 can be estimated at 2,031.3 million dollars if all the Latin American countries are considered, and at 1,421.2 million if Venezuela is excluded.

Although the situation seems to have improved slightly in 1963, the figures available—which cover only the changes in the official liquid assets (foreign exchange and monetary gold) of the central monetary authorities during the first nine months and the changes in the net IMF position during that year—cannot be compared with the figures for the preceding years which cover all the changes in the region's net monetary reserves. In any case, the increment estimated on the basis of provisional figures (299.7 million dollars for the region as a whole and 111.4 million with Venezuela excluded) is much less than the decrease recorded since 1960 and, *a fortiori*, since 1958.

The decline in net monetary reserves in 1960–62 was common to all the countries of the region (see table 253). Peru was the only country to enjoy an appreciable cumulative increase (57.4 million dollars) in its reserves during that period, and two other countries—Haiti and Nicaragua—maintained their position.

All the rest incurred losses, the most seriously affected being Argentina (258.5 million dollars), Brazil (298.0 million), Venezuela (131.6 million), Uruguay (157.0 million), Colombia (169.9 million), Chile (81.5 million) and, to a lesser extent, Mexico (48.8 million). Moreover, the losses incurred by the Dominican Republic, albeit relatively small (28.1 million dollars), are substantial when compared with its total reserves.

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[28] See *External financing in the economic development of Latin America*, op. cit., chapter V.

METHODOLOGICAL NOTE

1. SOURCES

For the period 1960–62, International Monetary Fund, *Balance of Payments Yearbook*, vols. 13, 14 and 15.

For 1963: estimates according to various sources: trade returns of the Latin American countries; United States Department of Commerce, *Survey of Current Business*, February 1963, and *Foreign Grants and Credits*, 31 December 1962 and 1963; International Bank for Reconstruction and Development, *Statements of Loans, December 31, 1962* and *1963*; Inter-American Development Bank, *Statements of Approved Loans, December 31, 1962* and *1963*; International Finance Corporation, *Statement of Operational Investment, December 31, 1962* and *1963*; International Development Association, *Statement of Development Credits, December 31, 1962* and *1963*; Export-Import Bank of Washington, *Statement of Loans and Authorized Credits, December 31, 1962* and *1963*; Social Progress Trust Fund, *Annual Reports 1961* and *1962*, and *Statements of Approved Loans, December 1963*; Agency for International Development, *Status of Loans Agreements, December 31, 1963*; International Monetary Fund, *International Financial Statistics*, February 1962 and 1963.

2. DEFINITIONS

(*a*) GOODS, SERVICES AND PRIVATE DONATIONS

1. *Goods and services*

1.1. *Merchandise (f.o.b.)*

This item corresponds to item 1 of the Global Balance of Payments Summary as defined by the IMF in the *Balance of Payments Manual*, 3rd ed., Washington, 1961, pp. 20–22. It covers all merchandise transactions as defined by the IMF, op. cit., pp. 38–53. The imports registered on a c.i.f. basis in the IMF *Balance of Payments Yearbook* for six countries (Argentina, Chile, El Salvador, Haiti, Mexico and Uruguay) have been re-estimated on an f.o.b. basis, using the ratios of freight and insurance to the c.i.f. value of imports already used in a previous ECLA study, entitled *External financing in the economic development of Latin America* (E/CN.12/649/Rev.1), Methodological Note to appendices I and II.

1.2. *Non-monetary gold*

This item corresponds to item 2 of the Global Balance of Payments Summary. It covers the transactions of non-monetary gold as defined by the IMF, op. cit., pp. 54–64.

1.3. *Freight, insurance and other items of transportation*

This item corresponds to items 3 and 4 of the Global Balance of Payments Summary. It covers freight, insurance and other items of transportation as defined by the IMF, op. cit., pp. 66–81. The debit on freight and insurance registered on a c.i.f. basis in the IMF *Balance of Payments Yearbook* has been re-estimated on an f.o.b. basis for six countries (Argentina, Chile, El Salvador, Haiti, Mexico and Uruguay).

1.4. *Travel*

This item corresponds to item 5 of the Global Balance of Payments Summary. It covers all travel transactions as defined by the IMF, op. cit., pp. 82–83.

1.5. *Investment income*

This item corresponds to item 6 of the Global Balance of Payments Summary. The credit entries cover residents' income from financial investment abroad and the debit entries the income of foreigners from financial investment in Latin America. According to the IMF definitions, a broad distinction has been made between the income from direct investment enterprises and from other investment.

1.6. *Other Services*

This item corresponds to items 7 and 8 of the Global Balance of Payments Summary. It covers all the transactions defined by the IMF, op. cit., pp. 89–100, as "Government transactions not included elsewhere and other services".

2. *Private donations*

This item corresponds to item 9 of the Global Balance of Payments Summary. It covers all the transactions defined by the IMF, op. cit., pp. 101–104, as private transfer payments, e.g., all transfer payments without *quid pro quo* between the private sector of the Latin American countries and foreign countries.

(*b*) OFFICIAL DONATIONS AND NON-COMPENSATORY CAPITAL

1. *Official donations*

This item corresponds to item 10 of the Global Balance of Payments Summary. It covers all the transactions defined by the IMF, op. cit., pp. 105–109, as central government transfer payments, i.e., transfer payments without *quid pro quo* between the official sector of the Latin American countries and foreign countries.

2. *Private long-term capital*

2.1. *Private long-term liabilities*

2.11. *Direct investment.* This item corresponds to entries for liabilities in item 11.1 of the Global Balance of Payments Summary. It covers changes in long-term capital invested in direct investment enterprises (i.e., enterprises in which non-residents maintain some degree of managerial control) in Latin America by non-residents.

2.12. *Other long-term liabilities.* This item corresponds to part of the entries for liabilities in items 11.2 to 11.7 of the Global Balance of Payments Summary. It covers all the changes in the long-term liabilities of the private sectors (i.e., resident individuals, and non-governmental enterprises and institutions other than monetary institutions) in Latin America, excluding direct investment enterprises, whose changes in long-term liabilities are reported under item (*b*) 2.11. It must be noted that changes in the outstanding amount of the loans obtained by the private sector of a Latin American country but guaranteed by the recipient country's government, which are reported by the IMF as changes in the long-term liabilities of the private sector, have been considered as far as possible in the present study as changes in the long-term liabilities of the official sector.

2.2. *Private long-term assets*

This item corresponds to the entries for assets in items 11.1 to 11.7 of the Global Balance of Payments Summary. It covers all the changes in the long-term assets held abroad by the Latin American private sector.

3. *Official long-term capital*

3.1. *Official long-term liabilities other than balance-of-payments loans*

This item corresponds to part of the entries for liabilities in items 11.2 to 11.7, 13.1 to 13.3, 14.1, 14.2, 14.4, 14.5 and 15.4 of the Global Balance of Payments Summary. It covers all the changes in long-term liabilities other than balance-of-payments loans of the local and central governments in Latin America, excluding the central monetary authorities but including the other monetary institutions. As explained above, the changes in the outstanding amounts of the long-term loans granted to the private sector of a Latin American country and guaranteed by the recipient country's government, which are reported by the IMF as changes in the long-term liabilities of the private sector, have been considered in the present study as changes in the long-term liabilities of the official sector. Furthermore, changes in the outstanding amounts of long-term loans granted to monetary institutions other than central institutions (deposit money banks, savings banks and similar institutions) have been included in the changes in the long-term liabilities of the official sector.

3.2. *Official long-term assets*

This item corresponds to the entries for assets in items 13.1 to 13.3, 14.1, 14.2, 14.4 and 14.5 of the Global Balance of Payments Summary. It covers all the changes in the assets held abroad by the local and central governments of the Latin American countries, excluding the central monetary authorities.

4. *Short-term capital*

This item corresponds to part of item 12, to items 14.3, 14.6, 16.1, 16.2, 16.4, 16.5 and to part of item 16.3 of the Global Balance of Payments Summary. It covers all the short-term transactions of the private sector, the local and central governments and the monetary institutions excluding the central monetary authorities. Transactions corresponding to deferred import payments are excluded.

(*c*) COMPENSATORY FINANCING

1. *Deferred import payments*

This item corresponds to parts of the entries for liabilities in item 12 of the Global Balance of Payments Summary. Credit entries cover increases in import arrears and debit entries decreases in import arrears. The only figures actually recorded are for Brazil and Colombia.

2. *Balance-of-payments loans*

This item corresponds to part of the entries for liabilities in items 14.4 and 15.4 of the Global Balance of Payments Summary. It essentially covers withdrawals and repayments with respect to long-term loans granted to central monetary authorities and defined as dollar exchange credits, credits for refinancing purchases abroad, or even credits for financing essential imports, provided that they are not granted for the financing of specific development projects. It eventually includes loans which have the same purposes but are granted to the central government rather than to the central monetary authorities.

3. *Foreign exchange reserves*

3.1. *Liabilities*

This item corresponds to the entries for liabilities in items 15.2, 15.3 and 15.5, and to part of the entries for liabilities in item 15.4 of the Global Balance of Payments Summary. It covers all changes in the short-term liabilities of central monetary authorities to foreign monetary authorities or to private foreign persons. Hence it includes changes in liabilities to private firms arising from swap transactions.

3.2. *Assets* (*increase*)

This item corresponds to the entries for assets in items 15.2, 15.3, 15.4 and 15.5 of the Global Balance of Payments Summary. It covers all changes in liquid foreign assets of the central monetary authorities.

3.3. *Net IMF position*

This item corresponds to item 15.1 of the Global Balance of Payments Summary. It covers all changes in the net IMF position of the Latin American countries. According to the IMF definition, the net IMF position is equal to the member's gold subscription, plus its repurchases of currency subscription, minus its net drawings or plus the Fund's sales of its currency, plus or minus the Fund's administrative and operational expenditures or receipts in its currency. Debit entries under this item cover increases in the resources that the member provides to the Fund; credit entries cover increases in the resources that the Fund provides to the member.

4. *Official monetary gold* (*increase*)

This item corresponds to item 15.6 of the Global Balance of Payments Summary. It covers changes in the gold reserve of the central monetary authorities. It excludes changes in the gold reserves of commercial banks, which are included under item (*b*) 4.

3. LATIN AMERICA'S ESTIMATED INTERNATIONAL TRANSACTIONS IN 1963

(*a*) 1.1. The merchandise transactions (f.o.b.) have been estimated on the basis of figures proceeding from the trade returns of the Latin American countries. These figures have been readjusted as far as possible in order to make them comparable with those entered in the balance of payments for the previous years. For example, imports, which are generally calculated on a c.i.f. basis in the trade returns, have been re-estimated on an f.o.b. basis, using the same ratio of freight and insurance to the c.i.f. value of imports as in 1962 (12 per cent).

(*a*) 1.2. Not available.

(*a*) 1.3. It has been assumed that the credit and debit entries for freight, insurance and other items of transportation have maintained the same relationship to the f.o.b. value of exports and imports as in 1962.

(*a*) 1.4. It has been assumed that the net credit entry for travel increased in 1963 in relation to its level in 1962, at the same annual rate as in 1960–62.

(*a*) 15.1. It has been assumed that the net debit entry for direct investment income was equal to the average net debit entry for 1960–62.

(*a*) 15.2. It has been assumed that the net debit entry for other investment income increased in 1963 in relation to its level in 1962 at the same annual rate as in 1960–62.

(*a*) 1.6. It has been assumed that the net debit entry for other services was equal to the average net debit entry for 1960–62.

(*a*) 2. It has been assumed that the net debit entry for private donations decreased in 1963 in relation to its level in 1962 at the same annual rate as in 1960–62.

(*b*) 1. This item covers only donations to the Latin American countries from United States official agencies as entered in the annual reports of those agencies for 1963.

(*b*) 2.11. This item covers only the net inflow (excluding reinvested earnings of subsidiaries) of United States direct investment into Latin America, as reported in the United States balance of payments with the region for 1963. Figures are not available for Latin America excluding Venezuela.

(*b*) 2.2. This item covers only the changes in direct and portfolio investment, and in the other long-term assets held in the United States by private persons or firms (other than United States direct investment enterprises) resident in Latin America, as these changes are reported in the United States balance of payments with the region for 1963. Figures are not available for Latin America excluding Venezuela.

(*b*) 3.1. This item covers the net inflow of the long-term loans (other than balance-of-payments loans) granted to Latin America by non-monetary international institutions and United States official agencies, as entered in the annual reports of these institutions and agencies for 1963. Part of this inflow into the Latin American private sector has been entered under item (*b*) 2.12 for the previous years. Accordingly, the figure for 1963 is not comparable with the corresponding figures for preceding years.

(*b*) 3.2. Not available.

(*b*) 4. This figure covers only the net balance of changes in the United States private and government short-term claims on the Latin American countries and in Latin American short-term claims on United States commercial firms and brokers and on the United States Government (other than interest-bearing securities and notes), as these changes are reported in the United States balance of payments with the region for 1963.

(*c*) 1. Not available.

(*c*) 2. This item covers only changes in the balance-of-payments loans granted to Latin America by United States official agencies.

(*c*) 3.1. Not available.

(*c*) 3.2. This item covers changes in the central monetary authorities foreign exchange holdings during the first nine months of 1963, as reported in *International Financial Statistics.*

(*c*) 3.3. This item covers the changes in the net IMF position of the Latin American countries for 1963, as reported in *International Financial Statistics.*

(*c*) 4. This item covers the changes in the gold reserves of the central monetary authorities during the first nine months of 1963, as reported in *International Financial Statistics.*

Part Four

THE CUBAN ECONOMY

Chapter X

THE CUBAN ECONOMY IN THE PERIOD 1959–63*

A. INTRODUCTION

1. MAIN CHARACTERISTICS OF THE NEW ECONOMIC ORGANIZATION

Since 1959 Cuba's story has been that of a relatively highly developed Latin American export economy, whose basic patterns of political and economic organization are undergoing a rapid process of change. In this sense, the economic events of the past four or five years cannot be viewed from the same angle as developments taking place within cut-and-dried institutional channels and modes of action. In effect, the present stage—which cannot be regarded as at an end—is one of radical changes and adjustments directed towards the formation of a different economic system, and it is these that have determined the principal characteristics of economic development during the period. On the other hand, there has been no essential change in the country's structure of production. In 1964 Cuba's is still, in essence, an export economy, and its economic policy is definitely geared to this pattern of development.

By virtue of the changes referred to, the country's wealth and means of production have been nationalized, and most of the latter have become the property of the State. This in turn has entailed modifying the organization of the public sector in order to fit it for direct management of the various production, trade and services units, and a system of planning and centralized direction of economic activity has been established. Sweeping changes have likewise been introduced in the organization of the financing and market system; the centres of decision have been shifted and their operational machinery altered to meet both planning requirements and the needs created by the new patterns of income generation and distribution.

Cuba's economic organization implies the co-ordination of all sectors of productive activity and their subordination to the over-all and specific objectives established in the plans sanctioned by the Government. As in other centrally planned economies, the programming of production and supplies is the pivot upon which the proper functioning of the whole complex of inter-industrial relationships hinges. Hence it is that the financing sector lacks objectives of its own, and plays the subsidiary role of providing the means of payment which facilitate the mobilization of real resources, besides exercising supplementary control over the development of economic activities in relation to the projections embodied in the plan.

Physical planning comprises both the preparation of balance-sheets† of material and human resources and the programming of flows of goods to and from the various consumers. Thus, on the one hand, a direct link is established between sectoral development programmes and the available supplies of resources, and, on the other, implementation of the plan is ensured as regards the distribution of the flows in question between production and consumer goods.

The supreme organ in this field is the Central Planning Board (Junta Central de Planificación—JUCEPLAN),[1] which is the hub of a vast network of agencies connected at all levels with the administrative machinery. The system of decentralization and the formulation, supervision and execution of the plans are organized on the basis of four major categories. The first corresponds to JUCEPLAN, next to which come the various Ministries and other high-ranking administrative agencies.[2] Around these, and under their respective jurisdictions, are clustered the "consolidated enterprises" (trusts),[3] which constitute administrative and executive centres whose function is to direct and control the complexes of production units that belong to one and the same branch of activity, or process goods or render services of a similar kind; these form the fourth and last administrative and economic level of the planning system.

The process of economic programming stems from the decisions and directives whereby the Council of

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* As indicated in the title, the period studied here extends from 1959 to 1963. When possible, comparisons were made with 1957, the last normal year of the pre-revolution period and, in more general terms, the most satisfactory of the post-war years. At times it was possible to complete a longer series including still earlier years (agricultural sector, foreign trade). In other instances, chiefly because there were no data for years prior to 1961 or 1960, or else for want of comparability, statistical data could be incorporated only for the last three or four years. Most of the statistics to hand came from exclusively official sources.

† *Translator's note.* The term "balance" as applied in the present article embraces a balance-sheet proper plus its projection over the period covered by the plan.

[1] Its composition is as follows: (*a*) a plenary Council presided over by the Prime Minister and made up of the Ministers for the various branches of the economy, the Minister for Economic Affairs acting as technical secretary; (*b*) an Executive Committee appointed by the plenary; and (*c*) six Departments (administration, agriculture, industry, internal trade, labour and public works, budgeting and statistics).

[2] In addition to the National Land Reform Institute (Instituto Nacional de la Reforma Agraria—INRA), which may really be regarded as the Ministry of Agriculture, there are other agencies, such as the National Fisheries Commission (Comisión Nacional de Pesca—CNPESCA), the Cuban Institute of Cinematography (Instituto Cubano de Arte e Industria Cinematográfica—ICAIC), the National Institute of Tourism (Instituto Nacional de Industria Turística—INIT) and the National Institute of Sport, Physical Education and Recreation (Instituto Nacional de Deportes, Educación Física y Recreación—INDER), under which significant numbers of "consolidated enterprises" are grouped.

[3] For example, about fifty "trusts", which account for the bulk of industrial output, are dependencies of the Ministry of Industry.

Ministers establishes the general guidelines for economic and social development plans. On these bases, and in collaboration with the Council of Ministers, JUCEPLAN draws up a simplified preliminary version of the plan ("draft economic policy directives"). This indicates in some detail the implications of the general directives in terms of the more specifi cproduction, supply and investment targets that should be attained by the various sectors of the economy, and presents physical balance-sheets for a limited number of essential goods.

Once the Government has approved this simplified version of the plan, the Ministries and other government agencies start work on the detailed formulation of their respective programmes of action, which are sub-divided among the "consolidated enterprises", and then split up by these in their turn among the various production units for which they are responsible.

As targets are adjusted and incompatibilities eliminated throughout the whole course of this process, all that is left for JUCEPLAN to do, when it receives the programmes submitted by the government dependencies, is to fit the various parts of the plan together and introduce such modifications as may prove necessary on account of incompatible elements not reconciled at the ministerial level. Lastly, JUCEPLAN presents the complete version of the plan to the Council of Ministers, which approves it and adopts final decisions with respect to any discrepancies not smoothed out during the preceding stages. The plan then becomes law, and is transmitted to all the governmental administrative units to be broken down and put into execution.

The structure of the programmes for the economy as a whole and in specific sectors or at the different levels of economic administration—Ministries, enterprises and production units—is approximately the same, plans being drawn up to cover production, supplies and supply quotas, manpower, and finance and costs.

As regards the allocation of production and other resources to alternative uses, and the consonance of this distribution with planning objectives, a complicated system of physical and synthetic balance-sheets has been devised. By means of the former, supplies and requirements in respect of each product can be compared in physical terms, while the latter present income generation and distribution, production and other macro-economic variables in terms of aggregate values.

With respect to the preparation of the balance-sheets› it should be pointed out that in practice, although the most important decisions concerning production and the allocation of resources are the responsibility of the supreme planning authorities, the Ministries, trusts and other administrative centres also have a measure of autonomy as regards setting up partial targets subsidiary to the over-all objective pursued, determining the volume and composition of production and proposing amendments to the centrally established control figures. In actual fact, out of a total of 650 physical balance-sheets, only those relating to a list of 100 items (products of basic importance) are prepared in detail by JUCEPLAN, which also allocates supplies to the various consumers. For the items on a second list (centralized products), the balance-sheets are formulated and distribution determined by the Ministries and other central agencies, while the remainder of the balance-sheets are left in the charge of the trusts.[4]

The programming of investment follows much the same lines as the planning of production. On the basis of the general economic policy directives issued by the Council of Ministers, JUCEPLAN distributes investment resources among the various sectors of the economy and social development projects. Similarly, subject to the approval of the Council of Ministers, it decides in principle what funds are to be absorbed by the most important capital formation projects, besides allocating the requisite financing to the Ministries and other agencies.

This does not mean that investment projects are all centralized. From the Ministries usually emanate a number of proposals designed to establish a balance between projected demand and existing production capacity, while the trusts and the production units launch others relating to the renewal and expansion of plant. Thus, one function of the Ministries is to select the decentralized projects that are presented at the level of the enterprises or production units for incorporation in the annual investment plan. Lastly, at the national level, JUCEPLAN establishes an order of priorities for the list of projects forming the total investment plan, and submits it to the Council of Ministers for approval.[5]

In the context of the specific problems of agriculture, the sector comprising the State farms must be differentiated from that of the small private farmers. In the former, activities are programmed in accordance with the general procedures described above, and the National Land Reform Institute (Instituto Nacional de la Reforma

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[4] The list of "products of basic importance" comprises raw materials or essential inputs, certain capital goods, staple foodstuffs, the principal export and import commodities, and products whose distribution presents difficulties at lower levels within the planning machinery. The "centralized products" include intermediate, capital or consumer goods that are of vital importance in particular branches of production or for a specific agency. Lastly, the "products allocated by the enterprises" are items in short supply or used sporadically, which are not distributed at other levels within the planning machinery. In all these cases, the balance-sheets are drawn up and the allocation of products determined in collaboration with the leading consumer or supplier agencies, and it is the function of the immediately superior organ to approve the decisions adopted and eliminate any discrepancies that may arise in the process.

[5] The planning process in the case of investments exceeding certain predetermined minimum values (nominal investments) falls into three parts: (*a*) the investment programme proper; (*b*) the preliminary project (investment task); (*c*) the final project (technical documentation). The investment programmes embody information on the objectives and justification of the investment, as well as on the probable location of the project and the total sum involved, broken down by construction, equipment and assembly work. The preliminary project is prepared by the agency making the investment, and comprises data on the technique to be applied, location, and building schedules, together with a specification of the characteristics of the completed works. Lastly, the final project consists of a detailed description of the technical plans and location, with a breakdown of estimated costs. Investments falling short of the minimum (non-nominal investments) are incorporated in the plans as a lump sum, and are controlled by the Ministry or agency to which the unit making the investment is attached.

Agraria—INRA)[6] is responsible for drafting over-all agricultural development plans, as well as for directing State agricultural enterprises and supervising the implementation of programmes and projects. In the case of private farmers, a series of indirect procedures has been devised with the aim of channelling their activity along he general lines laid down in the plans and controlling he marketing of their products. Through the National Association of Small Farmers (Asociación Nacional de Agricultores Pequeños—ANAP), INRA has carried out programmes in connexion with credits, the supply of nputs and mechanized services, to facilitate certain agricultural operations and establish remunerative prices.[7] The marketing of agricultural products is effected basically through the pooling and purchase centres (Centros de Acopio) organized by INRA, into which the output of he State farms is channelled, together with the supply quotas contributed by the small farmers under the terms of their agreements with INRA itself.[8]

In the industrial sector, the production units are organized, according to the nature of their output, in clusters around 74 major trusts, which in their turn centre and depend upon the Ministries of Industry, Public Works and Transport and Communications, INRA and the Cuban Institute of Cinematography (Instituto Cubano de la Industria Cinematográfica—ICAIC). The Ministry of Industry and INRA are in charge of the leading groups of trusts, which account for 76 and 18 per cent, respectively, of the industrial production in the hands of the State.

The current sale and purchase operations conducted by industrial enterprises with one another and with other sectors of the economy are formalized by means of contracts stipulating quantities, delivery dates and other terms, in conformity with the supply plan and the physical balance-sheets. As a general rule, sales to other industries or sectors of production are made directly by the enterprises concerned.[9] Lists of fixed prices are approved beforehand by JUCEPLAN and are incorporated in the enterprises' costs and financing plans. In this way, inter-industrial transactions give rise to a movement of means of payment that is reduced to the drawing and receipt of cheques through the accounts opened by the enterprises with the National Bank.

In relation to the organization of labour, Cuba's planning machinery has encountered a number of stumbling-blocks of different kinds. In the first place, the acute shortage of skilled labour and technicians has made it difficult to attain the productivity targets established in the plans. Again, the existence of considerable disparities in the wage scales of the enterprises that have passed into the hands of the State has also hindered the establishment of standards of remuneration consonant with the quality, characteristics and quantity of the work carried out in the various productive activities.

The total wage aggregate (Fondo de Salarios or Wage Fund) is established pursuant to the policy directives laid down by the Council of Ministers, the amount it represents being distributed and modified in the course of the process of adjustment and co-ordination of plans that takes place at all levels of the administrative apparatus.[10] At the present time, both in agriculture and in industry, a system of standards of work is beginning to take root which is calculated to facilitate the establishment of uniform wage scales, as well as of individual or collective economic incentives whose ultimate aim is to improve levels of productivity and the distribution of the labour force by branches of activity.

The legal instrument for the regulation of conditions of work takes the form of the collective contracts negotiated between the trade unions and the productive enterprises. These also specify in concrete terms the duties of the group of trade-union members employed, in accordance with production plans, standards of work and flow charts.[11]

Under the financing system instituted in Cuba, the national budget is the key mechanism for the allocation of funds and financial control of the operations undertaken by the enterprises and other public agencies. Since the income of the great majority of State enterprises automatically goes into the public Treasury, and their outlays and investment expenditure are covered by budgetary appropriations, in conformity with cost, production and capital-formation plans, the budget is functionally a financial plan for the mobilization and distribution of funds in direct relation to the programme targets of the different economic and social sectors.[12]

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[6] Since its most recent reorganization, INRA includes the following administrative subdivisions: (*a*) the *viceministerio*, or department of agricultural production, which directs the "groupings" of farms in all matters connected with production plans, through the provincial organizations; (*b*) that of economics, responsible for formulating agricultural development plans; (*c*) that of "stocks", whose function is the pooling, purchase and distribution of crops; (*d*) that of mechanization and agricultural industries; and (*e*) that of private production and co-operatives.

[7] An attempt has been made to use these incentives to stimulate the formation of larger productive units which will facilitate crop and supply programming. Farmers' credit and supply associations have been established for the pooling of credits and supplies. Experiments have also been made in the formation of agricultural associations whose members cultivate their land in common and pool their implements and machinery.

[8] Except for the amounts stipulated in the agreements in question, which are concluded through ANAP, small farmers retain the right to sell their produce directly to consumers.

[9] There are, however, some units engaged solely in the distribution of intermediate goods, in cases where the demand or supply situation displays certain special characteristics (sporadic and small-scale consumption, widely scattered sources of supply, etc.).

[10] Broadly speaking, the funds received by an enterprise or agency to cover wages are estimated on the basis of the volume of work required for the implementation of production programmes, the average wages previously paid and the projected increases in productivity.

[11] Membership of the trade unions is voluntary. Those who join enjoy certain advantages, for example, in respect of the distribution of housing units and the use of the recreation centres run by the trade unions themselves. Approximately 70 per cent of the workers in Cuba belong to the various organizations established, which in their turn form part of the Federation of Revolutionary Workers of Cuba (Confederación de Trabajadores Cubanos Revolucionarios—CTCR). Another of the functions of CTCR is to advise the Government on wage policy and, in conjunction with the Ministry of Labour and the trade union concerned, to help solve the conflicts that may arise in connexion with the collective contracts.

[12] In the case of economic units under the direction of the Ministry of Foreign Trade and INRA, a different financing régime (system of financial autonomy) has been or is being introduced. It consists essentially in leaving enterprises free to cover their expenditure directly with their own resources and giving them access—also directly—to bank credit. Consequently, the State enterprises subject to this régime transfer to the national budget only the profits shown at the close of each financial year.

In this way, the income of government enterprises (in net terms) has become the main source of Treasury funds. Next, but on a smaller scale, follows the revenue deriving from taxes payable by the population at large and by private enterprises.

A supplementary contribution to the management of the budget, for which the Ministry of Finance is responsible in the first instance, is made by the Banco Nacional de Cuba through the control it exercises over disbursements and credit.[13] This institution periodically credits each enterprise's expenditure account with the sums allocated to it in the budget, entering its income and the funds accorded to it for investment purposes in separate accounts. Commercial credits for the financing of current operations are confined in principle to those State enterprises which are subject to the system of financial autonomy, and to the private sector of economic activity. In practice, however, they have also been granted to cover the deficits of certain State enterprises that are run at a loss.

Goods are marketed through three main distribution channels: (*a*) external transactions; (*b*) the market for intermediate products; and (*c*) the consumer goods market.

Transactions with other countries are a State monopoly in the hands of the Ministry of Foreign Trade and its specialized enterprises. Their ultimate objective is to obtain supplies of goods that are not produced in the country, or at any rate not in large enough quantities, as well as to secure a flow of foreign exchange sufficient to finance imports of such goods, in keeping with domestic market supply plans and over-all economic development objectives. Enterprises specializing in foreign trade buy from domestic producers or sell ou the home market at the fixed prices stipulated for intermediate transactions, registering profits or losses proportional to the differences between these prices and the corresponding international quotations.

The market for intermediate products is organized through the basic balance-sheets, the supplies and supply quota plans, the contracts negotiated between enterprises and the control of financial movements exercised by the Ministry of Finance and the National Bank.

Lastly, the organization of the consumer goods market is mainly in the hands of the Ministry of Internal Trade[14] and its network of business enterprises and retail shops and stores operating throughout the country. Enterprises selling directly to the public obtain their stocks from other production enterprises or from the wholesale agencies of the Ministry of Internal Trade itself.

In principle, the purchasing power that flows into the hands of the population is kept in line with the volume and composition of the goods available on the consumer market through the co-ordination of the plans relating to supplies and reserves, sales, wages and labour. Other instruments have also been used, such as the manipulation of retail prices, the rationing of a wide variety of goods in short supply, and the organization of programmes to encourage popular savings.

Distinctions must be drawn between the price-fixing procedures applicable to products of basic importance and to other goods, in the first place, and secondly between those relating to intermediate products and to end goods.

In the case of the products of basic importance—goods that are essential for mass consumption or for the operation of productive activities—the Council of Ministers, on the basis of detailed proposals prepared by JUCEPLAN, decides upon the price levels concerned, as well as on any changes to be introduced. For other goods, the price schedules are drawn up by the Ministries and central agencies—which collect and co-ordinate the proposals of the consolidated enterprises and production units—and are submitted to JUCEPLAN for final approval.

Price formation in the market for intermediate products (wholesale prices) is regulated by a series of principles deriving essentially from planning requirements. In the first place, standard prices are established for long periods and as far as possible subjected to the minimum number of changes, with a view to facilitating transactions among the enterprises, measurement of yields and auditing. Secondly, their levels and structure are determined with due regard to the costs structure of the production units and its influence on the attainment of production programme targets.

Lastly, retail prices and the marketing margins of distributing enterprises and units, once the schedules have been approved by JUCEPLAN, are fixed and compulsory for all transactions with consumers.[15] The criteria on the basis of which they are established include the principle of reconciling the purchasing power of the population (through the *fondo de compra* or purchasing fund) and the structure of demand with the available supply of goods from all sources (stockpiles, current production or imports).

2. OVER-ALL PICTURE OF THE CUBAN ECONOMY

In addition to the changes in economic organization and patterns of ownership, significant modifications have been introduced in the structure of income distribution.

Land reform and urban reform, by transferring a proportion of the income from the land and from real estate to the agricultural workers in rural areas and to the tenants of housing units in the towns, have increased the real income and strengthened the purchasing power of the groups concerned. A similar effect has been produced by the reductions decreed in certain public utility tariffs. In addition, the monetary income of the bulk of the population has increased as a result of higher wages and the rapid expansion of employment.

The broadening of the scope of social services (education, public health, housing) has constituted yet another lement in the redistribution of income. These changes ave had a powerful impact on the evolution of the rest f the economy. To their effect has been added the ecisive influence exerted by the rapid metamorphosis of oreign trade relations and the allocation of large sums o national defence. All these are the basic facts that ave been affecting, during recent years, the three central evelopment problems with which Cuba has traditionally een faced, namely: (*a*) the terms-of-trade effect; (*b*) the nder-diversification of economic activity; and (*c*) the eed to provide the labour force with productive and emunerative employment.

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[13] In addition to its functions as State Treasury and as the organ of financial control of economic activity, the National Bank has sole authority to issue currency and regulate its circulation, and is responsible for the administration of foreign exchange and international payments and other Central Bank functions, as well as for programmes designed to tap the savings of the population.

[14] The supply and purchase of the goods produced by the private sector is also under the charge of the Ministry of Internal Trade, except in the case of agricultural production, where INRA is responsible.

[15] The prices of goods produced by the private sector are determined freely, but are subject to certain government controls.

Under the stimulus of the marked expansion of internal emand, economic activity increased at a rapid rate in 959 and 1960, chiefly on the basis of more efficient tilization of installed production capacity. By this eans it was possible to draw into the production effort nd turn to good account significant human resources f which no use had previously been made. These forces ave continued to operate throughout the period, but ince 1961, owing to the action of a number of internal nd external factors, the rate of increase of the internal upply of goods and services has been more modest, and n 1961–63 equalled or only slightly exceeded the growth ate of the population.

Outstanding among these factors are the shortage of echnical and administrative personnel, aggravated by he fact that large contingents of skilled workers or echnicians have left the country; the difficulties of aintaining or increasing supplies of raw materials and pare parts from abroad; and the very instability of the rocess of transition to new patterns of economic organization, imputable partly to their own defective and nchoate character, and partly to the magnitude of the esources allocated to defence projects and activities.

It is in the agricultural sector that the influence of hese factors has been most marked. Concurrently with he gradual disappearance of the established system, ew patterns for the organization of production and arketing were being sought and tried out, but only entatively, and frequent changes were being introduced n agricultural administration. Qualified personnel were acking, especially at the entrepreneurial level, and the ector not yet reached by the effects of the land reform as lagging behind. These circumstances contributed to he decline in production for domestic consumption hich was registered in 1961. It should be pointed out, owever, that this downward movement was partly ounteracted in 1962 and 1963, and that over the period 958–63 the annual increase in the volume of foodstuffs roduced for the domestic market averaged 4.6 per cent, s against a population growth rate of 1.9 per cent. In ontrast, the rate of cattle slaughter fell off sharply from 962 onwards, as a result of over-slaughtering in the receding years. In 1963 the figure for cattle slaughter as 7.4 per cent lower than in 1957.

Much more serious was the decrease of 30 per cent —in relation to the 1957 level—registered in sugar roduction, as a result of the partly deliberate reduction f the area under cane and the shrinkage of the labour orce available for this activity, in consequence of wage olicy and of the changes in the structure of employment. Adverse factors of a circumstantial nature that omplete the agricultural picture are the effects of the severe and widespread droughts which occurred in 1961 and 1962 and the devastation caused by hurricanes in 1963.

The rest of the economy was also affected, although to a lesser extent than agriculture, by the unfavourable factors characterizing Cuba's process of transition from one economic system to another. The obstacles to purchasing the items needed for replacing and maintaining equipment from the leading traditional suppliers have constituted a serious handicap, and at times have brought transport activities partly to a standstill. This same problem—combined not only with the lack of qualified personnel but also with the difficulties of maintaining stocks of raw materials and spare parts and obtaining regular supplies with the required specifications—has had adverse repercussions on the normal operation of the manufacturing sector. Nevertheless, this has been one of the sectors whose growth has been most dynamic in the past few years; between 1961 and 1963 the annual rate of increase of the industrial product (excluding sugar) averaged almost 7.7 per cent. Lastly, owing to the tardiness of investment in the generation of electric power, and particularly in petroleum refining—despite the high indexes registered for the utilization of installed capacity —these activities have shown declining growth rates, which, although they have not created shortages that severely affect supplies for other branches of production, seem to be on the way to producing serious bottlenecks.

In respect of capital formation, problems have arisen which have slowed up the completion of projects and have retarded their impact on the expansion of the supply of goods and productive services. In the first place, part of the new investment has had to be used to replace capital goods which, for want of the requisite spare parts and proper maintenance, have depreciated unduly fast. Secondly, the expansion and diversification of investment programmes at a time when the planning machinery was in process of organization and consolidation has meant that investments have been spread out over longer periods, especially in the manufacturing sector.

The adverse effects of this state of affairs have been aggravated in so far as the growth of employment has outstripped that of production. In this sense, the employment problem has been only partly solved, and the difficulties still unsurmounted are reflected not only in a situation of virtual unemployment, but also in a decline in levels of productivity per active worker. This is one of the major problems with which the Cuban economy is faced today, and is affecting the agricultural and the manufacturing sectors alike.

The changes that have taken place in the external sector have been no less sweeping and profound than those introduced in the rest of the system. In the brief space of five years, the flows of commodity trade with the United States, which formerly represented the bulk of Cuba's foreign trade, have practically ceased, most of them having been diverted towards the centrally planned economies. This reorientation has had a far from negligible influence on the evolution of the balance of payments, and has affected the operation of other sectors of the economy through its repercussions on the supply of imports.

The decline in agricultural production for export— mainly of sugar—has been coupled, throughout most of the period, with a steady deterioration of external market prices for staple items; as a result, the value of export diminished by more than one third between 1957 and 1962. Of this decrease, 40 per cent is imputable to the reduction of the volume exported and the remainder (60 per cent) to the fall in prices. On the other hand, the additional drop of 100 million dollars registered between 1962 and 1963 was mainly due to the steady contraction of export volumes, since this was, of course, a year of high prices.

The low level which had been reached by international reserves in 1958 and the dwindling flow of foreign exchange export earnings as from 1959 led to the establishment of quantitative restrictions on imports and the application of selective criteria in respect of their composition. Between 1957 and 1962 their total value fluctuated around a level invariably lower than those registered in previous years, imports of consumer goods—especially durables—contracting by about 44 per cent, and those of fuels, raw materials and capital goods expanding by 10 per cent. Despite the restrictions, the trade balance was persistently negative, showing a cumulative deficit of over 550 million dollars between 1959 and 1963. To cover this, recourse to foreign loans became necessary. It is estimated that external borrowing during the period amounted to approximately 700 million dollars.

The increase in public expenditure in order to finance investment programmes and the expansion of social services and defence activities, together with the growth of the population's monetary income and purchasing power as a result of wage increases and the transfer of large masses of income through land and urban reform and reductions in certain public utility rates, have created strong inflationary pressures in the consumer goods markets. Although fairly satisfactory in comparison with other periods, the increase in agricultural and industrial production for the home market has not been enough to cover the expansion in demand.

Moreover, the reductions in the over-all volume of imports caused by the decline in the purchasing power of exports and the need to maintain and augment purchases of capital goods and raw materials abroad have made it impossible for the inflationary pressures to be eased through the acquisition of goods from the rest of the world. The result has been the building up of a large internal deficit which has had to be controlled through strict rationing and higher prices for most consumer goods. Moreover, this has led to vast sums of money being tied up in savings accounts. The excessive liquidity of the economic system makes it difficult to solve the problem of productivity through cash incentives and involves factors that may lead to the continuation of the inflationary pressures in future.

From 1959 to 1963 economic policy was directed at the above-mentioned problems and, at the same time, at laying the bases for the kind of development pattern that is gradually being established. In 1959 and 1960 this policy was to a certain extent of a compensatory nature, its purpose being to remedy the reduction in employment brought about by the retrenchment in the private sector when wealth and resources first began to be controlled and nationalized and transferred to State ownership. This policy made it possible not only to maintain but to increase employment and, in keeping with the aims of income redistribution, helped to bring about the rapid expansion of the social services to which investment funds were largely devoted in those years.

Subsequently, in 1961 to 1963, economic policy was confronted with the problem of the drop in productivity. Training programmes for the industrial labour force were intensified and campaigns launched to raise output per employed person. Meanwhile, the organization and operation of the government agencies responsible for the centralized administration and management of the economy were modified and rearranged. Some progress has been made in solving these problems, but nevertheless little has been accomplished in comparison with what still remains to be done.

During the same three years an attempt was made to tackle some of the problems deriving from the suspension of supplies from Cuba's major traditional market. To this end, large sums were invested in machinery and equipment to replace, through other sources of supply, some of the items that were rapidly depreciating for want of spare parts. In addition, the investment programmes placed special emphasis on the metal-transforming and metallurgical industries in an attempt to ensure the availability of spare parts and other inputs needed for the proper functioning of the different sectors of production, such as industry, agriculture and transport.

As regards the development pattern of the Cuban economy, current economic policy has three main aims:[16] (*a*) an increase in the volume of exports, primarily based on the sugar industry; (*b*) the diversification of agriculture and promotion of stock farming; and (*c*) industrialization, based on light industries producing consumer and intermediate goods from national resources and raw materials. The fact that the objectives set for the structure of production present a more balanced picture than at the beginning of 1959 is due to the decline in livestock inventories in 1959 and 1960 and above all to the sugar crisis in 1962 and 1963. Furthermore, the new policy is an indication of the fact that diversification is being viewed as a medium rather than a short-term problem, and reflects the provisional solution adopted to the problem of how resources can best be divided among the heavy industries manufacturing capital goods and the light industries producing consumer goods, etc.

Within the framework described above, development efforts have taken the form of an intensive investment and capital formation campaign concentrated, since 1961, on the directly productive sectors. This has made it possible to carry out projects which have increased agricultural production capacity, appreciably enlarged the amount of crop land available and added to the infrastructural works. At the same time capital has been invested in numerous branches of industry, and will lead to a considerable expansion of installed capacity in the manufacturing sector in 1964–66.

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[16] As indicated in an address by the Prime Minister, Mr. Fidel Castro, at the closing session of the First National Assembly of Bank Employees on 5 February 1964.

B. INSTITUTIONAL CHANGES AND INCOME REDISTRIBUTION

1. State ownership and centralized planning

he characteristics of the Cuban economic system as cribed earlier are not the product of the structural nges made at the beginning of the new system of ernment. On the contrary, they derive from the lution of the methods of centralized administration the economy, and from the internal and external nges that took place in economic relations through- the period 1959–63.

n view of the extent and rapidity of the transforma- , modifications were often made in the system of lic administration, as well as in the economic policy ectives themselves, in order to adapt them, in the t of the experience gained, to the fluctuating external internal conditions in which the Cuban economy been evolving in the last few years. Hence, although planning agencies became more stable from 1959 vards, it was not until 1960 and 1961 that their struc- l organization began to take shape with the forma- of the Central Planning Board in March 1960; at same time, the administration was reorganized on the s on which it now operates, the planning machinery he former public bodies being strengthened and new ans set up, including the Ministry of Industry and the istry of Foreign Trade (February 1961) to which ortant programming functions were assigned. During 2 and 1963 further changes were introduced: JUCEPLAN was given a wider sphere of action; the structure of INRA was altered to enable the anization to meet the requirements of the new tem of agricultural administration and control; (c) the authority of the National Bank was extended permit it to establish a stricter system of control and gramming in respect of the financial and monetary ects of the economy.

Vhile progress was made in establishing and co- inating the different administrative, technical and ormation organs forming the nuclei of economic nning, the plans themselves were mainly prepared the form of annual development programmes so as to force economic policy into an unduly rigid mould a time of administrative reconstruction and rapid nges.

n addition, one of the economic policy goals set after 9 was aimed at keeping production levels steady ile the production systems were being overhauled. e preparation of long-term plans was therefore post- ned, except in a few sectors such as electric power, long-term planning was not really undertaken until 4.

2. The organization of agriculture

he promulgation of Cuba's first Land Reform Act May 1959) marked the beginning of a far-reaching nge in the system of land tenure and the organization agricultural production and distribution. A substan- proportion of the country's agricultural assets, luding the large estates and numerous installations merly owned by the foreign sugar companies, was en over by the State, which thus came to own 40 per cent of the farm land, a figure which rose to over 60 per cent after the second Land Reform Act.[17]

From 1959 to mid-1961, agricultural production was in the hands of: 1, a private sector consisting of smallholders—grouped into the National Smallholders Association (ANAP)—and the owners of farms with an area of more than 67.1 hectares (five *caballerías*); 2, a public sector formed by three groups: (*a*) sugar-cane co-operatives (*cooperativas cañeras*); (*b*) people's farms (*granjas del pueblo*); and (*c*) farms under direct State management. This structure was subsequently changed, being reduced to the smallholders' group and a sector consisting of State farms, all organized along the same lines.

The administrative organization responsible for carrying out the land reform and for establishing and supervising commodity purchasing and sales programmes has also undergone some modification. In view of the urgent need to implement the land reform and keep up the level of production, Cuba was divided into "agricultural development zones", which more or less corresponded to political and administrative units each comprising a number of municipalities. Following the consolidation of the Government's administrative and planning machinery at the beginning of 1961, the management of the agricultural sector was centralized through the creation of the Administración General de las Granjas del Pueblo and the Administración General de Cooperativas Cañeras. Finally, the promulgation of the second Land Reform Act marked the start of a decentralization process: (*a*) dividing the land into administrative and economic areas in which one or more Basic Agricultural Production Groupings (*Agrupaciones Básicas de Producción Agropecuaria*) will be set up, each formed by a nucleus of farms; and (*b*) establishing a régime of financial independence for each Grouping, later to be extended to each individual member farm. It is hoped to put the new system into practice at the end of 1964.

3. Changes in industrial organization

During 1959 and part of 1960 State intervention in the management of the industrial sector was confined to the relatively small group of nationalized enterprises and to the establishment of policy directives through the department created for that purpose in INRA. Subsequently, as a result of the change in the conditions governing external demand and supplies and the decision to speed up the process of planning and centralization of development policy, a move was quickly made to nationalize industrial plants and led to State control and management of more than 90 per cent of the manufacturing industry.[18] This policy move was accompanied by a reorganization of the government agencies responsible for the direction of the industrial sector, which led to the creation in 1961 of a Ministry of Industry together with a large number of State-owned enterprises which take part in the preparation and execution of the development programmes for the different branches of industry, in the light of the central policy and guidelines laid down by the State.

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[17] Passed in October 1963, the second Land Reform Act provides for the nationalization of all rural estates consisting of more than 67.1 hectares. The proportion of State-owned sugar-cane plantations which, in 1961, was approximately 40 per cent (about 550,000 hectares) is believed to have increased to nearly 70 per cent (some 886,000 hectares) by the end of 1963. In addition, the cattle herds owned by the State are estimated to have risen from 27 per cent to between 50 and 60 per cent of the total inventory.

[18] At the end of 1960 State-owned enterprises accounted for 50 per cent of the value of industrial production. A year later the proportion was between 75 and 80 per cent, and is now more than 95 per cent of the total.

While these developments were taking place, drastic organizational reforms were being carried out in the trusts and their enterprises with a view to establishing standard methods of administration, control and planning in the different facets of manufacturing production. When artisan activities or small workshops accounted for a significant share of production, as, for instance, in the footwear, clothing and tobacco industries, the reorganization also included the merging of the small units into larger plants to make for easier management, and facilitate the introduction of programmes for modernization and raising productivity.

Lastly, both the difficulties created by the disruption of Cuba's traditional foreign trade channels, and the centralization of productive activities, led to a complete recasting of the supply and distribution systems, for which the respective Ministries of Internal Trade and of Foreign Trade have been primarily responsible since 1961. Consequently, not only has the former trade machinery had to be supplemented but extensive changes have had to be made in its structure so as to adapt it to the new conditions governing the operation of the economy.

The building of storage and distribution centres, the execution of projects for adapting port facilities and the replacement of numerous commercial middlemen, are an indication of some of the areas in which the effort to reorganize the flow of supplies and to remove specific obstacles is being made.

4. Income distribution

The evolution of the population's real levels of income and consumption has been clearly influenced by the policy of income redistribution put into effect at the beginning of 1959. The redistribution was achieved through the application of a number of measures, more particularly land reform, rental legislation, urban reform, wage and employment policy, lower rates for certain public utilities and the expansion of government programmes for providing social services for the people.

As a result of the first land reform, nearly 100,000 tenants, share-croppers and squatters (*precaristas*) were given land and the right to receive the entire revenue accruing from their productive activities. Similarly, the urban reform signified the transfer of a substantial flow of income through the cancellation of mortgages, establishment of time-limits for amortization of housing costs, and rent reductions.[19]

On the other hand, the programmes for housing construction and extension of community services called for an investment of 261 million pesos during the period 1961–63, despite the reduced budget of the last two years, and an appropriation of 77 million pesos was provided for in the 1964 plan, approximately 60 per cent of which would be used for building 10,000 housing units. In 1959–60, 15,123 houses were completed and nearly 500 buildings were put up in rural areas for such different social purposes as educational centres, clinics, community centres, theatres, etc.

As regards employment, preliminary data indicate that an increase ranging from 20 to 25 per cent took place in the economy as a whole during the period 1956–57 to 1963. This increase absorbed approximately 50 per cent of the surplus labour hitherto unemployed or underemployed (see table 254).[20]

Table 254. Cuba: Employment and population

	1956–57	*1962*	*1963*
Employmen (thousand men/year) Agriculture	770	867	890
Industry and construction	290	397	425
Other	740	886	910
Total	1,800	2,150	2,225
Population (thousands)[a]	6,280	7,022	7,132

Sources: *Employment*: ECLA, on the basis of incomplete data and estimates from official sources. *Population*: 1958–62: JUCEPLAN; 1957 and 1963: ECLA estimates.

[a] Population in 1957–61:

Year	*Thousands*
1957	6,356
1958	6,510
1959	6,669
1960	6,810
1961	6,914

Growth has been particularly rapid in industry and construction, where employment seems to have gone up by more than 40 per cent. In addition, the total payroll increased, not merely because of the rise in employment but also as the result of annual increases in average wages up to 1962, roughly estimated (in nominal terms) to have been over 15 per cent higher than in 1958. It should be pointed out that the wage increases were not the same in all production sectors nor did they take place simultaneously. As a rule, they were granted first in industry and construction and only later to the agricultural sector.

Moreover, electricity rates for household use, as well as telephone charges, were reduced. There has also been a substantial expansion in the social services provided by the State for education, health, sports and entertainment.

Marked progress has been made in education, both as regards the school-age population at all grades, on the hand, and on the other adult education and the ansion of centres for different levels of technical ining.[21] Between 1958–59 and 1960–61 primary ool enrolment (excluding the children attending the mer private schools), totalled nearly 400,000, i.e., an rease of approximately 60 per cent. With the same eption, student enrolment at all levels also climbed 60 per cent (see table 255). This increase was naturally tched by a rapid rise in current budget expenditure l investment on education.[22]

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[19] In March 1959, the Rent Reduction Act provided for reductions of 50, 40 and 30 per cent, depending on whether the monthly rent charged before was less than 100, from 100 to 200 or more than 200 pesos. Subsequently the Urban Reform Act transferred the rights of ownership over residential buildings to the occupants or tenants upon payment of an annual sum equal to the total amount of the previous rent over a period of time ranging from five to twenty years, and varying in inverse proportion to the age of the building. Permanent usufruct of housing built or owned by the Government is granted against regular payments of not more than 10 per cent of the family income.

[20] According to various sources, the number of unemployed averaged between 350,000 and 400,000 a year, i.e., about 16 per cent of the labour force (see, for instance, Consejo Nacional de Economía, *El empleo, desempleo y subempleo en Cuba*, Havana, 1958.

Public health followed much the same pattern in that cost to the public was considerably reduced while number of hospitals was increased from 55 to 144 and that of beds from 22,080 to 38,199 between 1958 and 1963 (see table 256).

The disbursements made by the social security and pension funds mounted from 100.1 to 143 million pesos in the space of five years.

Lastly, stress has been laid on the development of other social services. For instance, between 1959 and 1963 about 37 million pesos were allocated for the installation of drinking water and sewage facilities and large outlays were made for the establishment of libraries and research centres as well as for community activities and sports, on which 57 million pesos were spent between 1961 and 1963.

Table 255. Cuba: Enrolment in educational institutions

(*Thousands*)

Level and type of education	*1957–58*	*1958–59*	*1959–60*	*1960–61*	*1961–62*
Primary	...	...	...	*1,133.0*	*1,742.8*[c]
For children[a] .	617.6[b]	582.2[b]	960.5[b]	1,062.0	1,166.3
For adults . .	34.0	34.2	71.2	70.0	575.5
Specialized . .	...	...	...	1.0	1.1
Intermediate . .	*76.8*	*81.0*	*88.8*	*118.8*	*176.2*[c]
General . .	57.4	63.2	59.7	89.8	109.3
Vocational . .	18.7	17.0	24.0	22.1	40.1
Technological .	0.7	0.8	5.1	6.9	26.7
Higher	—[d]	20.4	17.7	19.2	17.5[e]
TOTAL	...	...	...	*1,271.0*	*1,936.5*

SOURCE: JUCEPLAN.

[a] Pre-school to sixth grade.

[b] Official. Does not include enrolment in private schools.

[c] Data incomplete because not all schools reported.

[d] In this school year the State universities remained closed.

[e] For the 1962–63 school year.

Table 256. Cuba: Public health department hospitals and beds

	Hospitals		*Beds*		*Beds per 1,000 population*	
	1958	*1962*	*1958*	*1962*	*1958*	*1962*
Urban hospitals .	54	86	11,283	25,594	1.7	3.6
Rural hospitals .	...	34	...	880	...	0.1
Hospitals for workers . .	1	24	10	746	—	0.1
Polyclinics . .	...	...	...	42	...	—
Co-operative clinics	...	...	10,787	10,937	1.7	1.6
TOTAL	55	144	22,080	38,199	3.4	5.4

SOURCE: JUCEPLAN.

C. TRENDS RECORDED IN THE MAJOR ECONOMIC SECTORS

1. ECONOMIC ACTIVITY IN 1959–63

The annual growth rate of the national income aterial product) measured in terms of current prices was 9 per cent between 1961 and 1963. If due allowance is made for the effect of the rise in prices reflected in the trade sector, the growth rates of goods production and of the population were virtually the same during that period (1.7 and 1.6 per cent respectively) (see tables 257, 258 and 259). However, in order to obtain a more accurate idea of the supplies of goods and services available for direct consumption, the value of the social services excluded from the calculation of the material product must be added, and it should also be remembered that

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The number of scholarship students rose from 70,000 in 1961 ver 100,000 at the time this report was prepared.

Between 1959 and 1961 about 4,000 classrooms were built. ether with other school construction and repairs this entailed investment of 59 million pesos, to which should be added the of about 70 million pesos invested between 1962–64. Current enditure went up from 74 to 170 million pesos during 1959–61.

the fall in sugar production and exports did not reduce domestic supplies to the same extent, since the volume of imports continued to expand from 1960 onwards. In view of these facts, and of the changes in the import structure, the real *per capita* growth rate of consumption between 1961 and 1963 can be estimated at 2 per cent annually. Complete data are not available for 1959–60, but the quantum series indicate that the growth rates achieved during these two years were higher than in the succeeding three-year period (see tables 260 and 261).

Table 257. Cuba: Material product

Sector	*Millions of pesos*			*Annual growth rates (percentage)*		
	1961	*1962*	*1963*	*1961–62*	*1962–63*	*1961–63*
Agriculture[a]	466.0	496.0	496.8	6.4	0.2	3.2
Industry[b]	810.8	902.5	939.8	11.3	4.1	7.7
Construction	196.5	207.2	207.0	5.4	−0.1	2.6
Transport and communications	256.4	229.7	236.5	−10.4	3.0	−4.0
Other	c	53.1	56.0	—	5.5	—
Sub-total	1,729.7	1,888.5	1,936.1	9.2	2.5	5.8
Sugar	407.9	304.7	276.8	−25.3	−9.2	−17.6
Sub-total	2,137.6	2,193.2	2,212.9	2.6	0.9	1.7
Trade	594.0	799.4	1,031.3	34.6	29.0	31.8
TOTAL	2,731.6	2,992.6	3,244.2	9.6	8.4	9.0

SOURCE: 1961, JUCEPLAN. 1962 and 1963, ECLA, on the basis mainly of preliminary data on gross values of production provided by JUCEPLAN.

Note: The term *material product* represents the total value added in the processing of goods and provision of directly productive services during the year, expressed in terms of market prices. In Cuba the productive activities covered are agriculture, mining, manufacturing, construction, transport and communications, trade and repair services. Unlike some countries with a centrally planned economy, Cuba makes no restrictive adjustment in respect of the activities of transport, communications and trade. The term material product, as used in this table, differs from the term *gross domestic product at market prices* in that the former does not include such services as the provision of drinking water, financial, housing, personal and professional services, public administration and defence, and similar items regarded as non-productive. The figures for 1961 provided by JUCEPLAN represent, for each activity, the difference between the gross values of production and the values of the inputs, used, and the calculation is verified by means of direct estimates of the components of the value added. The figures for 1962 and 1963 are ECLA estimates based on preliminary data for the gross values of production, also provided by JUCEPLAN. Except in the cases listed below, these figures were obtained by applying the coefficients of value added recorded for 1961 to the gross values of each of the sub-sectors that make up total economic activity. These sub-sectors consist of five in agriculture (see table 274,) eleven in industry (see table 282), three in transport and communications (freight transport, passenger transport and communications), and three in trade (domestic trade, foreign trade and catering services).

The exceptions to the above-described method of calculation were: (*a*) agriculture excluding sugar-cane production in 1963 was estimated on the basis of the previously calculated figures for 1962 and the change in the quantum index of production (see table 273); (*b*) the figure for livestock for 1963 was calculated on the basis of the physical output for 1962 and the change in the quantum of production for certain livestock products; (*c*) for petroleum and petroleum products in 1962 and 1963, and for trade in 1962 the total of real inputs was deducted from the gross values of production; (*d*) the value added for the food industries in 1963 was obtained on the basis of the figure for 1962 and the change in the quantum of production; (*e*) for construction in 1962 and 1963, the figures for the gross values of production were first revised on the basis of the data on construction investment and repair and maintenance expenditure; (*f*) for the industry sector (unclassified), as the data on gross values available for 1963 were incomplete at the time when the information was being compiled, an over-all estimate of the unrecorded portion was added (8.0 million pesos). The quantum index figures referred to were provided by JUCEPLAN.

Given the method of calculation used for the estimates of value added for 1962 and 1963, and the fact that the intersectoral transactions are recorded at constant prices, the figures obtained reflect the changes in the volume of production, except in the trade sector, which is subject to the influence of variations between internal and external price levels. It should be borne in mind in this connexion that in Cuba the enterprises that produce goods and services conduct no direct transactions either with final consumers or with foreign purchasers.

The term gross investment is also used in a more restrictive sense than usual, in that it does not include office machinery and equipment, or equipment for the provision of certain non-productive services (see also tables 291 and 292).

[a] Excluding sugar-cane production.

[b] Excluding the sugar industry, but including mining and energy.

[c] Distributed among other branches.

The more dynamic branches of the economy have usually been the industrial sector, followed by food production for the home market and construction. The trade sector, while it seems to have developed very rapidly (at a rate of 31.8 per cent during the period under consideration) must have had a much smaller real growth rate, since the rise in prices was chiefly concentrated in the sales of final consumer goods. On the other hand, after the bumper crop of 1961 (5.9 million tons) the share of sugar production in the value added dropped nearly 130 million pesos. This was partly responsible r the decline of activities in the transport sector in 62, which was also affected by problems of vehicle aintenance (see again tables 257 and 259).

Table 258. Cuba: Quantum index of production (*1961=100*)

Sector	*1962*	*1963*
riculture[a]	106.4	106.6
lustry[b]	11.3	115.9
nstruction	105.4	105.3
ansport and communications	89.6	92.2
Sub-total	109.2	111.9
gar	74.7	67.9
TOTAL	102.6	103.5

OURCE: As for table 257.

[a] Excluding sugar-cane production.

[b] Excluding the sugar industry.

Table 259. Cuba: Distribution of the material product (*Percentage*)

Sector	*Total*			*Excluding trade*		
	1961	*1962*	*1963*	*1961*	*1962*	*1963*
Agriculture	17.1	16.6	15.3	21.8	22.6	22.5
Industry	29.7	30.2	29.0	37.9	41.1	42.5
Construction	7.2	6.9	6.4	9.2	9.4	9.4
Transport and communications	9.4	7.7	7.3	12.0	10.5	10.7
Other	—	1.8	1.7	—	2.4	2.5
Sub-total	63.3	63.1	59.7	80.9	86.1	87.5
Sugar	14.9	10.2	8.5	19.1	13.9	12.5
Sub-total	78.3	73.3	68.2	100.0	100.0	100.0
Trade	21.7	26.7	31.8	...	...	...
TOTAL	100.0	100.0	100.0	...	...	...
Total for agricultural sector (including sugar cane)	26.7	23.4	21.1	34.2	32.0	30.9
Total for industrial sector (including the sugar industry)	34.9	33.5	31.8	46.9	45.7	46.6

SOURCES: 1961, JUCEPLAN. 1962 and 1963, ECLA estimates based mainly on preliminary data on gross values of production provided by JUCEPLAN.

On the demand side, employment and income distri- ition policies brought about a notable broadening of e purchasing power of the people which was mainly rected towards the consumer goods market. Although omestic supplies were insufficient to cover the increase nd, in the case of some commodities, fell appreciably 1961, *per capita* consumption tended to improve— ompared with 1957—in respect of such agricultural aples as rice, wheat flour, tubers and vegetables (see table 262). On the other hand, consumption of fats and livestock products, for which there are few figures available, does not seem to have regained its previous levels despite higher output of pork, poultry, fish and other products. Footwear and cotton textiles, for their part, have been produced in sufficient quantities for domestic consumption to increase, especially among the broad masses.

2. THE EVOLUTION OF FOREIGN TRADE AND ITS CHANGE OF DIRECTION

The structural changes that have taken place in Cuba's foreign trade mainly concern the direction taken by the flow of goods and the characteristics and nature of the problems confronting the external sector in its endeavour to develop. Owing to the size of the Cuban market and the existing specialization of the production system, exports must expand vigorously—even over the long term—in order to finance the growing need for imported goods generated by the dynamics of economic development. In this connexion the weakening of the capacity to import registered over the past few years has placed a heavy burden on the balance of payments and this, in turn, has led to a curtailment of imports and the contracting of external loans.

(a) *The orientation of trade*

The very sizable increase in trade with the centrally planned economies, combined with the virtual cessation of trade with the United States and other countries, have been the salient features of Cuba's international economic relations in the last few years. This process started with

Table 260. Cuba: Production quantum for agriculture
(*Thousands of tons*)

Commodity	*Output*						*Stocks*	
	1957	*1958*	*1959*	*1960*	*1961*	*1962*	*1962*	*1963*
Cereals								
Rice in the husk	167.3	207.1	282.2	306.5	212.8	229.9	179.3	184.7
Maize	246.9	148.1	193.2	213.9	197.8	158.7	80.0	87.0
Millet	...	13.7	20.2	31.9	27.4	27.1	24.1	9.9
Pulses								
Beans	35.7	10.0	13.8	37.1	59.5	55.7	29.1	16.5
Yams and tubers								
Potatoes	94.3	70.6	82.9	101.2	89.6	100.2	88.5	85.7
Yucca	186.3	213.2	223.8	255.1	154.5	162.5	33.8	89.4
Boniato	161.3	159.8	183.3	230.5	117.0	181.0	82.6	81.8
Ñame	23.0	26.2	30.7	41.3	25.0	20.2	10.5	8.7
Malanga	91.2	225.7	239.8	256.7	77.0	60.9	25.4	44.7
Vegetables								
Tomatoes	43.9	55.2	65.0	116.3	109.2	140.4	127.7	93.4
Onions	1.3	7.8	11.1	18.0	6.0	16.1	13.9	1.2
Garlic	3.0	5.4	5.9	6.5	1.3	0.24	0.18	0.60
Cucumbers	...	...	...	...	...	4.5	3.7	6.6
Squashes	...	...	...	...	...	78.1	40.6	46.3
Other	...	...	...	...	...	70.0	41.7	67.7
Fruit								
Plantains	...	...	...	...	...	123.6	64.2	71.7
Bananas	...	...	...	...	...	76.5	41.3	42.2
Pineapples	...	...	...	...	...	55.0	43.9	41.0
Citrus fruits	153.0	69.7	69.7	72.9	91.0	117.0	98.0	103.7
Papaya	...	...	...	...	...	48.7	18.2	32.8
Other	...	...	...	...	...	58.0	48.0	74.5
Industrial crops								
Sugar cane[a]	44.7	45.7	48.0	47.5	54.3	36.7	36.7	31.4
Coffee	36.6	31.0	55.1	37.0	46.5	55.0	52.2	35.2
Tobacco	41.7	50.6	35.6	45.3	57.6	53.4	51.5	48.3
Cacao	...	...	...	...	...	2.5	2.5	2.5
Henequen	...	9.4	8.5	13.2	11.1	8.8	8.8	...
Kenaf	...	...	...	...	...	0.8	0.8	...
Cotton	—	0.2	4.3	21.7	14.1	10.8	10.8	10.6
Groundnuts	5.0	3.8	4.7	25.2	10.1	13.0	12.0	3.4
Soya beans	—	0.3	1.1	2.7	0.7	1.08	1.0	0.5
Forage plants								
Forage plants[a]	...	...	...	...	...	12.3	—	—

Source: JUCEPLAN.

[a] Millions of tons.

Table 261. Cuba: Physical volume of the output of selected manufactures[a]

Manufacture	*Unit*	*1957*[b]	*1960*[c]	*1961*[d]	*1962*[d]	*1963*[d]
opper concentrate	Thousands of tons	...	27.1[e]	15.5	21.1	22.5
opper ore	Thousands of tons	142.8	88.5[e]	147.1	187.4	207.0
anganese ore	Thousands of tons	66.1	122.8	67.1	118.2	126.0
anganese sinter	Thousands of tons	...	...	67.1	55.1	37.5
ickel and cobalt sinter	Thousands of tons	...	18.6[e]	18.1	16.6	14.8
ickel and cobalt oxides	Thousands of tons	...	15.7[e]	21.2	20.9	15.5
ickel and cobalt sulphides	Thousands of tons	...	...	2.6	10.4	9.4
arbon ingot steel	Thousands of tons	...	...	107.4	55.0	63.0
owel screws	Thousands of tons	...	...	103.8	122.1	81.9
astings	Thousands of tons	...	...	...	4.4	10.2
ugar processing machinery	Thousands of tons	...	...	3.8	3.3	3.9
ement	Thousands of tons	650.8	813.3	870.9	778.9	812.2
les	Thousands of square metres	...	...	248.8	313.9	332.1
efractory bricks and blocks	Millions	...	...	2.2	2.3	2.9
rocessed crude petroleum	Thousands of tons	1,767.8	...	3,001.3	3,673.4	3,691.3
uel oil	Thousands of tons	716.4	1,379.0	1,391.8	1,995.0	2,222.0
otor vehicle gasoline	Thousands of tons	387.1	599.0	655.9	766.2	723.0
as oil	Thousands of tons	439.2	...	473.5	536.0	484.0
ubber footwear	Thousands of pairs	...	3,880.0	3,719.0	4,858.0	6,904.0
yres	Thousands	156.0	343.0	362.0	391.0	363.0
ner tubes	Thousands	60.0	...	127.0	271.0	196.0
ulphuric acid	Thousands of tons	34.4	43.6	58.6	138.7	125.2
ayon cord	Thousands of tons	4.4	7.5	1.8	2.5	1.5
ayon fibre	Thousands of tons	0.6	...	1.0	0.8	0.7
ayon staple	Thousands of tons	4.8	...	1.9	4.7	5.2
etergents	Thousands of tons	...	13.0	13.4	16.5	12.9
ashing soap	Thousands of tons	...	33.7	25.7	33.6	34.1
atches	Millions of boxes	...	...	192.5	221.1	224.6
erums for intravenous injection	Millions of litres	...	...	...	0.9	1.2
ulpha drugs	Tons	...	...	...	24.5	28.1
etracyclines	Tons	...	...	...	3.6	5.9
otton fabrics	Thousands of tons	2.7	11.3	11.1	13.4	10.2
nitted socks and stockings	Millions of pairs	...	...	13.3	14.6	18.0
otton yarns	Thousands of tons	...	...	12.3	12.5	14.2
acks of *kenaf*	Millions	...	...	—	—	1.9
eather footwear	Thousands of pairs	...	10,203.0	3,398.0	7,085.0	11,836.0
aw sugar	Thousands of tons	5,672.0	5,862.0	6,740.0	4,815.0	3,824.0
efined sugar	Thousands of tons	...	591.0	694.4	741.1	843.1
ondensed and evaporated milk	Tons	...	...	...	39,285.0	49,470.0
asteurised milk	Tons	...	...	...	132,218.0	147,079.0
utter	Tons	...	...	...	2,450.0	2,222.0
efined vegetable oil	Tons	...	...	...	34,241.8	32,159.8
heat flour	Thousands of tons	64.9	106.6	106.3	142.5	132.0
igars	Millions	9,630.0	...	13,611.0	14,400.0	15,344.0
wist tobacco	Millions	...	...	177.5	292.9	367.8
everages	Millions of litres	...	...	199.9	228.6	230.3
eer	Millions of litres	129.2	...	139.4	92.7	89.3
lass containers	Millions	...	23.8[f]	50.8	72.0	97.6

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[a] See also table 276.

[b] The sources used were *Anuario Estadístico de Cuba, 1957*; ECLA, *conomic Survey of Latin America, 1957*; and JUCEPLAN.

[c] Preliminary estimates prepared by JUCEPLAN.

[d] State-owned sector only. JUCEPLAN.

[e] Exports.

[f] Thousands of metric tons.

Table 262. Cuba: Supply of selected consumer goods

	Thousands of tons					*Kilogrammes* per capita				
	1957	*1960*	*1961*	*1962*	*1963*	*1957*	*1960*	*1961*	*1962*	*1963*
Rice										
Production	167.3	306.5	212.8	229.9	236.8	26.2	45.0	30.7	32.7	33.2
Imports	191.6	218.7	191.7	201.0	140.8[a]	30.0	33.1	27.7	28.6	19.7[a]
TOTAL	*358.9*	*525.2*	*404.5*	*430.9*	...	*56.2*	*78.1*	*58.4*	*61.3*	...
Maize										
Production	246.9	213.9	197.8	158.7	172.7	38.7	31.4	28.6	22.6	24.2
Imports	0.4	39.8	42.9	103.7	85.5[a]	0.1	5.8	6.2	14.8	12.0[a]
TOTAL	*247.3*	*253.7*	*240.7*	*262.4*	...	*38.8*	*37.2*	*34.8*	*37.4*	...
Beans										
Production	35.7	37.1	59.5	55.7	31.6	5.6	5.4	8.6	7.9	4.4
Imports	62.4	76.9	52.3	39.2	38.1[a]	9.8	11.3	7.6	5.6	5.3[a]
TOTAL	*98.1*	*114.0*	*111.8*	*94.9*	...	*15.4*	*16.7*	*16.2*	*13.5*	...
Tomatoes										
Production	43.9	116.3	109.2	140.4	102.6	6.9	17.0	15.8	20.0	14.4
Imports	0.4	—	—	—	—	0.1	—	—	—	—
TOTAL	*44.3*	*116.3*	*109.2*	*140.4*	*102.6*	*7.0*	*17.0*	*15.8*	*20.0*	*14.4*
Potatoes										
Production	94.3	101.2	89.6	100.2	97.0	14.8	14.9	13.0	14.3	13.6
Imports	25.0	33.4	19.4	39.8	8.2[a]	3.9	4.9	2.8	5.7	1.1[a]
TOTAL	*119.3*	*134.6*	*109.0*	*140.0*	...	*18.7*	*19.8*	*15.8*	*20.0*	...
Other tubers										
Production	461.8	783.6	373.5	424.6	732.9	72.4	115.1	54.0	60.5	102.7
Imports	—	—	—	—	—	—	—	—	—	—
TOTAL	*461.8*	*783.6*	*373.5*	*424.6*	*732.9*	*72.4*	*115.1*	*54.0*	*60.5*	*102.7*
Wheat-flour										
Production	64.9	106.6	106.3	142.5	132.0	10.2	15.7	15.4	20.3	18.5
Imports	93.3	96.8	103.6	152.6	135.2[a]	14.6	14.2	15.0	21.7	18.9[a]
TOTAL	*158.2*	*203.4*	*209.9*	*295.1*	...	*24.8*	*29.9*	*30.4*	*42.0*	...
Meat										
Production	...	...	...	...	...	...	...	...	...	...
Imports	13.8	14.1	22.5	27.4	30.1[a]	2.2	2.1	3.3	3.9	4.2[a]
TOTAL	...	...	...	...	...	...	...	...	...	...
Fish and shell-fish										
Production	22.0	30.1	30.6	33.3	...	3.5	4.4	4.4	4.7	...
Imports	16.9	18.2	8.7	6.8	8.7[a]	2.7	2.7	1.3	1.0	1.2[a]
TOTAL	*38.9*	*48.3*	*39.3*	*40.1*	...	*6.2*	*7.1*	*5.7*	*5.7*	...
Milk										
Production	...	...	765.5[b]	659.3[b]	659.3[b]	...	...	110.7[c]	93.9[c]	92.4[c]
Imports										
Eggs										
Production	...	...	433.9[d]	530.0[d]	483.3[d]	...	...	62.8[e]	75.5[e]	67.7[e]
Imports										
Condensed and evaporated milk										
Production	...	...	...	39.3	49.5	...	...	...	5.6	6.9
Imports	2.8	21.3	15.2	15.1	17.7[a]	0.4	3.1	2.2	2.2	2.5[a]
TOTAL	...	...	...	*54.4*	...	...	...	...	*7.8*	...
Cheese										
Production	...	...	...	3.7	3.7	...	...	...	0.5	0.5
Imports	0.9	0.2	0.4	1.6	0.2[a]	0.1	—	0.1	0.2	—[a]
TOTAL	...	...	...	*5.3*	...	...	...	...	*0.7*	...
Butter										
Production	...	...	...	2.4	2.2	...	...	...	0.3	0.3
Imports	0.5	1.0	0.5	2.7	1.3[a]	0.1	0.1	0.1	0.4	0.2[a]
TOTAL	...	...	...	*5.1*	...	...	...	...	*0.7*	...
Refined vegetable oil										
Production	...	...	...	34.2	32.2	...	...	...	4.9	4.5
Imports	13.1	11.4	28.3	4.1	32.5[a]	2.1	1.7	4.1	0.6	4.6[a]
TOTAL	...	...	...	*38.3*	...	...	...	...	*5.5*	...
Lard										
Production	...	...	...	7.7	8.7	...	...	...	1.1	1.2
Imports	81.2	116.2	54.3	8.6	27.6[a]	12.7	17.1	7.9	1.2	3.9[a]
TOTAL	...	...	...	*16.3*	...	...	...	...	*2.3*	...
Cotton fabrics										
Production	2.7[f]	11.3	11.1	13.4	10.2	0.4	1.7	1.6	1.9	1.4
Imports	6.4	1.9	11.9	6.3	5.4[a]	1.0	0.3	1.7	0.9	0.8[a]
TOTAL	*9.1*	*13.2*	*23.0*	*19.7*	...	*1.4*	*2.0*	*3.3*	*2.8*	...
Footwear										
Production	...[g]	14.1[g]	7.1[g]	12.0[g]	18.7[g]	...[h]	2.1[h]	1.0[h]	1.7[h]	2.6[h]
Imports	0.2	0.1	0.2	0.1	0.2[a]	0.1	—	—	—	—
TOTAL	...	*14.2*	*7.3*	*12.1*	...	...	*2.1*	*1.0*	*1.7*	...

SOURCE: ECLA, on the basis of data from JUCEPLAN and MINCEX.

[a] January–September.

[b] Millions of litres.

[c] Litres.

[d] Millions.

[e] Units.

[f] Estimated on the basis of apparent consumption of raw cotton.

[g] Millons of pairs.

[h] Pairs.

the conclusion of trade and credit agreements with the Soviet Union, the People's Republic of China and other centrally planned economies,[23] which compensate somewhat for the drop in external demand caused by the United States ban on Cuban sugar. Whereas around 5 million tons of sugar were exported in 1959, some 60 per cent of which went to the United States market, 4.6 million of the 6.4 million tons sold abroad in 1961 consisted of purchases made by the centrally planned economies, in which the lead was taken by the Soviet Union with 3.3 million tons, followed by the People's Republic of China with 1 million tons. A similar situation has prevailed with respect to imports since the end of 1960, when the United States placed an embargo on goods for Cuba and the bilateral trade agreements with the centrally planned economies entered into effect.

Table 263. Cuba: Exports, by country or area of destination
(Millions of pesos, f.o.b.)

Country or area of destination	1958		1959		1960		1961		1962		1963[a]	
	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage	Value]	Percentage	Value	Percentage
United States	490.0	66.8	442.7	69.4	326.3	52.8	30.2	4.8	4.2	0.8	—	—
Canada	16.0	2.2	10.4	1.6	7.7	1.2	4.0	0.6	2.7	0.5	10.5	2.5
Other countries on the American continent	20.5	2.8	31.4	4.9	14.6	2.4	12.6	2.0	5.3	1.0	5.3	1.3
Socialist countries	18.9	2.5	13.9	2.2	149.9	24.3	458.1	73.4	426.9	82.0	276.4	65.8
Soviet Union	14.1	1.9	12.9	2.0	103.5	16.7	300.9	48.2	220.3	42.3	124.1	29.5
China (mainland)	3.6	0.5	—	—	32.1	5.2	91.6	14.7	89.0	17.1	45.5	10.8
Hungary	—	—	—	—	0.2	—	1.5	0.2	10.0	1.9	11.7	2.8
Poland	—	—	—	—	9.7	1.6	28.6	4.6	18.5	3.6	17.7	4.2
Eastern Germany	—	—	—	—	0.4	0.1	7.7	1.2	24.7	4.7	34.4	8.2
Czechoslovakia	—	—	0.2	—	1.3	0.2	16.7	2.7	37.0	7.1	31.8	7.6
Others	1.2	0.1	0.8	0.1	2.7	0.4	11.1	1.8	27.4	5.3	11.2	2.7
Western Europe	112.7	15.4	85.5	13.4	67.8	11.0	51.5	8.2	28.0	5.4	76.6	18.2
Others	75.5	10.3	53.8	8.5	51.8	8.3	68.5	11.0	53.5	10.3	51.1	12.2
TOTAL	733.5	100.0	637.8	100.0	618.2	100.0	624.9	100.0	520.6	100.0	420.0	100.0

SOURCES: 1958–60, foreign trade yearbooks; 1961–63, MINCEX.

[a] January–September.

Table 264. Cuba: Imports, by country or area of origin
(Millions of pesos, 1958–61 f.o.b., 1962–63 c.i.f.)

Country or area of origin	1958		1959		1960		1961		1962		1963[a]	
	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage
United States	542.5	69.8	458.5	67.9	281.5	48.5	23.7	3.7	0.6	—	—	—
Canada	18.1	2.3	12.9	1.9	16.2	2.8	35.6	5.6	11.9	1.6	4.6	0.9
Other countries on the American continent	85.1	11.0	71.7	10.7	42.2	7.3	11.8	1.8	14.0	1.8	4.9	0.9
Socialist countries	2.0	0.3	1.9	0.1	108.6	20.2	446.9	70.0	641.9	84.6	457.7	85.2
Soviet Union	—	—	—	—	80.2	11.8	262.6	41.1	410.7	54.1	295.5	55.0
China (mainland)	—	—	—	—	10.3	1.5	88.6	13.9	103.2	13.6	62.3	11.6
Hungary	—	—	—	—	0.9	0.1	8.2	1.3	12.6	1.7	9.1	1.7
Poland	—	—	—	—	4.4	0.6	17.9	2.8	22.7	3.0	22.2	4.1
Eastern Germany	—	—	—	—	4.0	0.6	22.8	3.6	27.5	3.6	18.1	3.4
Czechoslovakia	2.0	0.3	1.8	0.1	6.8	1.0	25.3	4.0	36.9	4.9	38.2	7.1
Others	—	—	0.1	—	2.0	0.4	21.5	3.3	28.3	3.7	12.3	2.3
Western Europe	108.7	14.0	101.6	16.1	103.8	16.4	73.0	11.4	44.9	5.9	37.3	6.9
Others	20.7	2.6	21.4	3.3	23.7	4.8	37.7	7.5	46.0	6.1	32.4	6.0
TOTAL	*777.1*	*100.0*	*674.8*	*100.0*	*679.9*	*100.0*	*638.7*	*100.0*	*759.3*	*100.0*	*536.9*	*100.0*

SOURCES: 1958–60, foreign trade yearbooks; 1961–63, MINCEX.

[a] January-September.

The events described above had a drastic effect on the flow of Cuban trade. The United States, which in 1958 had accounted for 67 per cent of Cuba's exports and 70 per cent of its imports, cut down its share three years later to 4.8 and 3.7 per cent respectively, and then virtually stopped trading with Cuba altogether, after its purchases of tobacco and deliveries of food and medicines had ended (see tables 263 and 264). By contrast,

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[23] The Soviet Union undertook to buy 2.7 million tons and to grant long-term credits for 100 million pesos. Under the relevant agreement, the amount was raised in September 1961 to 4.8 million tons for delivery between 1962–65 at the price of 4 dollar cents per pound. In 1963 a long-term agreement was signed covering the period 1965–70 and guaranteeing the purchase of an increasing volume of Cuban sugar up to a maximum of 5 million tons a year by the end of the period in question, at the fixed price of 6 cents per pound. In addition, the People's Republic of China agreed to buy 500,000 tons a year for five years.

Cuba's trade with the centrally planned economies has been increasing rapidly, and now represents 80 per cent of its external transactions. This has been partly due to the opening of the markets in those countries to Cuban exports and partly to the long-term loans granted to Cuba to enable it to stimulate capital formation and to finance the balance-of-payments deficit. Of this group of countries, the Soviet Union ranks first, accounting for 42 per cent of Cuba's exports and more than 50 per cent of its imports. Next in order of importance come the People's Republic of China and Czechoslovakia. Transactions with these three countries amounted in 1962 to 346 million pesos worth of sales and 550 million pesos worth of purchases, i.e., 66 and 72 per cent of Cuba's export and import trade respectively.

Table 265. Cuba: Value of exports at current prices

Product	1955	1956	1957	1958	1959	1960	1961	1962	1963[a]
				Millions of pesos f.o.b.					
Sugar and by-products	473.2	523.8	653.5	587.4	490.5	490.9	532.3	431.9	373.4
Ores	35.6	34.4	36.4	28.1	23.7	23.6	...	37.3	24.7
Tobacco	43.5	43.8	47.9	49.6	54.3	63.0	39.8	25.1	12.7
Coffee	4.1	21.5	12.5	7.1	2.6	4.6	...	6.7	0.5
Fruit and vegetables (fresh or canned)	5.9	7.8	7.9	8.0	7.7	8.5	...	5.9	0.2
Fish and shell-fish (fresh or canned)	2.5	3.4	7.2	8.4	4.2	3.6	...	1.6	1.0
Alcoholic beverages	1.2	1.3	2.5	5.9	1.9	2.0	...	—	0.6
Rayon fibres, yarns and cord	8.4	5.8	5.3	3.3	6.8	2.8	...	3.1	1.4
Other	19.8	24.4	34.5	35.7	46.1	19.2	...	9.0	5.5
TOTAL	594.2	666.2	807.7	733.5	637.8	618.2	624.9	520.6	420.0
				Percentage distribution					
Sugar and by-products	79.6	78.6	80.9	80.1	76.9	79.4	85.0	83.0	88.9
Ores	6.0	5.2	4.5	3.8	3.7	3.8	1.3	7.2	5.9
Tobacco	7.3	6.6	5.9	6.8	8.5	10.2	6.4	4.8	3.0
Coffee	0.7	3.2	1.5	1.0	0.4	0.7	...	1.3	0.1
Sub-total	*93.6*	*93.6*	*92.9*	*91.6*	*89.5*	*94.2*	...	*96.2*	*97.9*
Fruit and vegetables	1,0	1.2	1.0	1.1	1.2	1.4	...	1.1	0.0
Fish and shell-fish	0.4	0.5	0.9	1.1	0.7	0.6	...	0.3	0.2
Alcoholic beverages	0.2	0.2	0.3	0.8	0.3	0.3	...	—	0.1
Rayon	1.4	0.9	0.7	0.4	1.1	0.5	...	0.6	0.3
Other	3.3	3.7	4.3	4.9	7.2	3.1	...	1.7	1.3

SOURCES: 1955–60, foreign trade yearbooks, 1961–63, MINCEX.

[a] January–September.

Table 266. Cuba: Exports
(*Millions of 1955 pesos f.o.b.*)

Product	1955	1956	1957	1958	1959	1960	1961	1962	1963[a]
Sugar and by-products	473.2	533.9	522.4	546.4	469.8	542.4	...	494.2	316.7
Ores	35.6	34.4	42.8	33.4	27.2	23.3	...	31.9	20.2
Tobacco	43.5	45.7	52.2	54.6	52.7	49.0	...	28.5	9.9
Coffee	4.1	20.3	11.1	7.2	3.1	5.3	...	12.5	0.6
Other	37.8	39.4	51.5	57.6	69.3	30.2	...	18.6	8.3
TOTAL	594.2	673.7	680.0	699.2	622.1	650.2		585.7	355.7

SOURCES: 1955–60, foreign trade yearbooks; 1962–63, MINCEX.

[a] January–September.

Cuba's trade with Latin America has been declining, its imports having been particularly affected by the severing of trade relations with Venezuela and other countries in the region. In fact, the interruption in Cuba's petroleum purchases from Venezuela alone represented a reduction of more than 60 million dollars between 1958 and 1962 and a contraction of 75 per cent in its total volume of imports from Latin America. During that period Cuba's exports to the region as a whole dropped from 20.5 million dollars to 5.3 million dollars and its imports from 85.1 million to 14 million dollars.

Trade with other regions varied. With Canada and Western Europe it diminished, but showed signs of recovering from 1963 onwards thanks to the increase in sugar sales and the agreements concluded with France, Spain and the United Kingdom. Lastly, the growth of trade with Egypt, Japan and Morocco, in particular, has enabled exports to Asia and Africa to reach a steady level of more than 50 million dollars a year.

The shift in the direction of the import flows entailed a difficult process of adapting the production system and reorganizing foreign trade—a process which characterized the years from 1960 to 1963 and whose effects will continue to be felt for some time. The adjustments which had to be made not only involved the mechanics of international trade but extended to the transport, distribution and storage of external supplies, as well as the upkeep and maintenance of the equipment and other capital goods formerly bought in the United States.

Although the effects of these factors on production and costs are difficult to assess accurately, they were undoubtedly far-reaching. Evidence of this may be found in the frequent work stoppages which occurred in the production sectors for want of raw materials and spare parts and in the fact that a large proportion of the transport vehicles and farm traction equipment was practically unusable because of the difficulty of acquiring the necessary accessories and spare parts.

(b) *Exports*

The course followed by foreign trade and the balance of payments in recent years was largely determined by the decline in sugar production. Broadly speaking both the quantum of exports and their value at current prices followed a declining trend which lasted from 1957–58 to 1962. Although complete data for 1963 are not available, everything seems to point to a further decline, since the increase in prices was not sufficient to offset the sharp reduction (1.2 million tons) in sugar exports in 1962 (see tables 265 and 266).

Table 267. Cuba: Production and exports of sugar
(*Millions of tons of raw sugar equivalent*)

Year	*Production*	*Exports*
1952 . . .	7.2	5.0
1955 . . .	4.5	4.6
1956 . . .	4.7	5.4
1957 . . .	5.7	5.3
1958 . . .	5.8	5.6
1959 . . .	6.0	5.0
1960 . . .	5.9	5.6
1961 . . .	6.8	6.4
1962 . . .	4.8	5.0
1963 . . .	3.9	3.3

SOURCE: 1952–61, *Anuario Azucarero de Cuba*; 1962–63, JUCEPLAN and MINCEX.

(*i*) *Sugar*

In 1959–61 there was a progressive decline in the demand for Cuban sugar in the main world markets. World market prices fell in 1959 by 19 per cent, and this reduction, in conjunction with the falling off in the volume exported to the North American markets (9 per cent) and world markets (19 per cent), resulted in a reduction of about 100 million dollars in the value of exports and an accumulation of stocks of 1.2 million tons. In 1960 world prices improved somewhat, but the diversion of a million tons of sugar from the higher-price North American market to the world market resulted in a reduction in average earnings that could be offset only by an increase of over 13 per cent in the volume exported, the value of sales thus remaining stable at a level of 490 million dollars.

The depressive tendencies of the market were most marked during 1961. The increase in world production of cane and beet sugar to a level higher than that of consumption led to an unprecedented accumulation of stocks, which amounted to over 21 million tons for the second consecutive year. Average prices on the world market then fell to 2.91 dollar cents a pound, a reduction of 7 per cent compared with the average for 1960. In 1961 Cuban production amounted to 6.8 million tons (see table 267), of which 6.4 million were sold abroad at an average price of 3.64 dollar cents a pound, which was higher than the world price.

In the two subsequent years world production declined to a level below that of consumption, as a result of the unfavourable weather conditions affecting crops in Europe and other sugar-producing areas. World sugar stocks decreased by over 4 million tons; in 1962 prices began to rise, and in 1963 spiralled rapidly, with average prices of 12 dollar cents a pound in some months.

Cuba was able to benefit only partially from this price increase, because of the sharp reduction in its sugar production, which was 3 million tons less in 1963 than in 1961. In 1963 negotiations with the centrally planned economy countries led to an agreed price of 6 dollar cents a pound instead of 4 dollar cents, and a reduction in Cuba's supply quotas to those countries of a million tons, which were to be disposed of on the world market.

It seems likely that in the next few years prices will tend to fall because of a return to normal in world markets, and because according to available estimates there will be a rapid recovery in world sugar production.[24] This development will affect only that portion of Cuban exports that is not subject to price-stabilization agreements.

(ii) *Other exports*

There was a sharp increase in tobacco exports between 1957 and 1960, and their total value increased from 47.9 million dollars to 63 million dollars (see again tables 265 and 266). Exports were exceptionally high in 1960 because of the extraordinary purchases of cigar leaf by United States importers in order to accumulate reserve stocks in anticipation of supply problems, and the policy of stock liquidation adopted by the main Cuban producers. In subsequent years there was a sharp decrease in the volume exported, which reduced the value of sales abroad to 25.1 million dollars in 1962, and it is estimated that the figures for 1963 will reveal a further reduction.

This falling off in exports at a time when world production and trade followed a clearly rising trend was due to a number of internal and external factors. In the first place, in 1961 the United States market reduced its purchases of twist by 50 per cent, and in 1962 abolished all imports from Cuba. Secondly, sales to Latin America fell off considerably, and Spain also reduced its cigar purchases from 27 million to 7.6 million units. Certain supply problems also arose that limited sales abroad, problems connected with the change in the structure of production in order to increase the supplies of light tobacco called for by the structure of external demand, and the improvement of cigar wrapper-leaf, whose quality fell off during the period when production was being reorganized.

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[24] Estimated world production for 1964 is over 50 million tons, which will be the second largest crop for more than a decade.

The agreements concluded with the centrally planned economies—mainly Czechoslovakia and Eastern Germany—and more recently with Spain (for the sale of twist), should make possible a substantial recovery in the volume of exports of this product in the near future.

During 1959–63 there was a continuation of the declining trend in exports of ores that had started at the beginning of the fifties. This trend is attributable to unfavourable conditions of production, as regards both mining costs and the quality of processed ores, two factors that make it difficult for Cuba to compete during periods when world prices are low. This applies particularly to manganese, chrome and copper. Exports of iron ceased almost entirely in 1957, not only because of the cost problems already referred to, but also because of technical difficulties in eliminating the high content of chrome, cobalt or nickel from the ore mined. More recently the change in trade flows has tended to increase transport costs because of the diversion of exports to Europe and the centrally planned economies.

Table 268. Cuba: Exports of mining products

(Millions of pesos f.o.b.)

Year	*Total*	*Nickel*	*Copper*	*Iron*	*Manganese*	*Chrome*	*Other*
1955 . .	35.6	14.4	12.5	1.5	5.8	0.5	0.9
1956 . .	34.4	14.8	12.3	1.0	5.4	0.4	0.4
1957 . .	36.4	21.8	8.5	0.7	3.2	1.6	0.6
1958 . .	28.1	19.5	5.9	—	1.6	0.8	0.3
1959 . .	23.7	16.8	4.8	—	1.4	0.6	0.1
1960 . .	23.6	18.5	4.3	—	0.3	0.6	—
1962 . .	37.3	33.1	2.2	...	1.3	0.6	...
1963[a] . .	24.7	22.3	1.4	...	1.0	...	...

SOURCES: 1955–60, foreign trade yearbooks; 1962–63, MINCEX.

[a] January–September.

Table 269. Cuba: Indices of unit value of exports

(1955=100)

Product	*1956*	*1957*	*1958*	*1959*	*1960*	*1962*	*1963*
Sugar and by-products	98.1	125.1	107.5	104.4	90.5	87.4	117.9
Ores	100.0	85.1	84.1	87.2	101.1	117.1	122.4
Tobacco	96.7	91.7	90.8	103.1	128.6	88.2	127.7
Coffee	106.1	112.3	98.4	84.6	87.0	53.4	83.5
TOTAL	98.9	118.8	104.9	102.5	95.1	88.9	118.1

SOURCES: 1955–60, foreign trade yearbooks; 1962–63, MINCEX.

Total value has declined for the bulk of mineral product exports, this being particularly marked in the case of copper, iron and manganese. Sales of these three ores fell from 12.4 million dollars to 3.5 million dollars between 1957 and 1962 (see table 268). Despite these unfavourable factors the total value of mineral exports for 1962 amounted to 37.3 million dollars, as a result of the notable increase in the production of nickel, whose sales rose by over 50 per cent between 1957 and 1962.

Exports of coffee rose to a fairly substantial level in the second half of the fifties, sales abroad in 1956 amounting to nearly 21,000 tons with a value of 21.5 million dollars. The increase both in domestic production and in exports was due partly to the guaranteed prices established and the promotion measures adopted from 1954 onwards. However, since the potential capacity to expand the area under coffee is very small, the increase in supply must depend on the possibility of increasing efficiency and yield. This situation, combined with a rise in domestic consumption, led to a considerable reduction in the value and volume of exports. In 1962, although the crop was similar to that of 1956 (55,000 tons) and foreign trade was to some extent back to normal, the volume and value of exports was only 60 per cent and 30 per cent,[25] respectively, of the corresponding figures for 1956 (see again tables 265 and 266).

The hurricane that damaged plantations in the main production area in 1963 resulted not only in an almost total absence of coffee exports, but also a domestic deficit of considerable magnitude. In the circumstances it is likely that over the short term the declining trend in coffee's share in exports will continue.

Among other exports, the value of sales abroad of fruit, fish and shell-fish, alcoholic beverages and textile fibres fell by about 50 per cent in 1957–62, from 22.9

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[25] The reduction in value was due to the fall in world prices.

million dollars to 10.6 million dollars, and their contribution to total exports dropped from 2.8 to 2 per cent.

This general review of Cuban exports makes it clear that an increase in the capacity to import in coming years will depend basically on the possibility of expanding sugar production and exports. Although it is not improbable that exports of other products may recover, or even surpass former levels, an increase would not result in any substantial short-term changes in the balance of payments, because of their relatively small share in the total volume of exports.

Table 270. Cuba: Values of imports, at current prices

(*Millions of pesos c.i.f.*)

Product	*1956*	*1957*	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*[a]
Consumer goods	*288.8*	*328.2*	*311.2*	*247.3*	*200.2*	*183.0*	*183.7*	*114.0*
Durable	75.4	86.1	82.1	62.6	16.0	29.0	20.7	5.6
Non-durable	213.4	242.1	229.1	184.7	184.2	154.0	163.0	108.4
Fuels	*61.6*	*85.8*	*89.8*	*68.4*	*86.1*	*52.7*	*81.8*	*55.6*
Raw materials and intermediate products	*210.5*	*227.2*	*215.4*	*220.9*	*195.6*	*228.8*	*233.7*	*158.3*
Fixed capital goods	*150.3*	*203.7*	*193.2*	*197.6*	*150.2*	*236.2*	*260.1*	*125.9*
For agriculture	11.7	16.2	15.4	17.5	23.6	32.1	18.0	...
For industry	86.5	127.8	121.4	103.6	57.8	59.3	115.7	...
For transport	16.5	24.3	23.1	32.3	26.7	71.0	75.1	...
Building materials	35.6	35.4	33.3	44.2	42.1	73.8	51.3	...
Other	*2.7*	*5.2*	*45.2*	*8.0*	*5.7*	*1.8*	—	—
TOTAL	*713.9*	*850.1*	*854.8*	*742.2*	*637.8*	*702.5*	*759.3*	*453.8*

SOURCES: 1956–58, ECLA, on the basis of the data in foreign trade yearbooks; 1959–63, MINCEX.

[a] January–September.

Table 271. Cuba: Structure of imports

(*Percentage*)

Product	*1956*	*1957*	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*[a]
Consumer goods	*40.5*	*38.6*	*36.4*	*33.3*	*31.4*	*26.0*	*24.2*	*25.1*
Durable	10.6	10.1	9.6	8.4	2.5	4.1	2.7	1.2
Non-durable	29.9	28.5	26.8	24.9	28.9	21.9	21.5	23.9
Fuels	*8.6*	*10.1*	*10.5*	*9.2*	*13.5*	*7.5*	*10.8*	*12.3*
Raw materials and intermediate products	*29.5*	*26.7*	*25.2*	*29.8*	*30.6*	*32.6*	*30.8*	*34.9*
Fixed capital goods	*21.0*	*24.0*	*22.6*	*26.6*	*23.6*	*33.6*	*34.2*	*27.7*
For agriculture	1.6	1.9	1.8	2.4	3.7	4.6	2.4	...
For industry	12.1	15.0	14.2	13.9	9.1	8.4	15.2	...
For transport	2.3	2.9	2.7	4.4	4.2	10.1	9.9	...
Building materials	5.0	4.2	3.9	5.9	6.6	10.5	6.7	...
Other	*0.4*	*0.6*	*5.3*	*1.1*	*0.9*	*0.3*	—	—
TOTAL	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

SOURCES: 1956–60, foreign trade yearbooks; 1961–63, MINCEX.

[a] January–September.

(c) *The trade balance and imports*

As a result of the developments described above, the value of exports, apart from the slight recovery in 1961, attributable to the bumper sugar crop, has declined steadily from a level of 807.7 million dollars in 1957 to 520.9 million dollars in 1962, and probably less than 500 million dollars in 1963 (see again table 265).

The decrease of 287.1 million dollars between 1957 and 1962 was due to the reduction in the quantum of exports and to the decline in unit prices, whose index (base year 1955) fell from 118.8 to 88.9 during this period (see table 269). Of the reduction in value, 95 million dollars (40 per cent) was due to the reduction in the export quantum, and the remainder to the fall in export prices.

The depression of the export sector and the low levels of monetary reserves, which undermined the country's payments position from 1959 on, led to the adoption of a policy of import restriction[26] which, in conjunction with the programmes of investment and promotion of the development of productive activities, led to major changes in the structure of purchases abroad.

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[26] During 1959 restrictions were imposed on imports of luxury goods, and this was followed by establishment of a supplementary tariff on purchases of motor vehicles and of *ad valorem* duties on most products except staple foods. Subsequently the Banco de Comercio Exterior (Foreign Trade Bank) was established (April 1960)—replaced early in 1961 by the Ministry of Foreign Trade—and thus a strict control of imports was achieved, geared to the external supplies needed in accordance with the economic plans.

Table 272. Cuba: Trade balance

(Millions of pesos, exports f.o.b., imports c.i.f.)

Year	*Exports*	*Imports*[a]	*Balance*
1955 . . .	594,2	632.6	−38.4
1956 . . .	666.2	713.9	−47.7
1957 . . .	807.7	850.1	−42.4
1958 . . .	733.5	854.8	−121.3
1959 . . .	637.8	742.2	−104.4
1960 . . .	618.2	637.8	−19.6
1961 . . .	625.9	702.5	−76.6
1962 . . .	520.6	759.3	−238.7
1963[b] . .	420.0	536.9	−116.9

SOURCES: 1955–60, foreign trade yearbooks; 1961–63, MINCEX.

[a] For 1955–61 the surcharges on f.o.b. values are estimates prepared by MINCEX.

[b] January–September.

Imports of raw materials and fuels, which in 1957 represented 37 per cent of total imports, rose to 42 per cent in 1962. The share of capital goods also moved up in the same period, from 24 to 34 per cent. The share of non-durable consumer goods, on the other hand, fell after 1960, remaining stable at a level of about 22 per cent of the total. The brunt of the reduction in imports was borne by the durable consumer items, whose share dropped by over 70 per cent, amounting to only 2.7 per cent in 1962 (see tables 270 and 271).

Table 273. Cuba: Quantum indices of agriculture production

(1957=100)

Crop	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*
Cereals	100.8	136.4	149.8	111.9	112.5	115.1
Pulses	28.2	38.7	103.9	166.6	156.0	88.4
Yams and tubers	134.8	147.3	170.0	85.1	91.9	140.4
Vegetables	105.1	178.6	291.5	211.1	293.2	270.1
Industrial crops	102.9	109.5	108.5	125.6	96.9	81.2
Sugar cane	102.2	107.5	106.2	121.5	82.1	70.2
Other	104.8	115.6	115.6	137.9	142.0	114.8
TOTAL	*105.1*	*116.0*	*123.1*	*123.5*	*104.4*	*97.1*
TOTAL, excluding sugar cane	*108.8*	*127.4*	*145.2*	*126.1*	*133.9*	*131.6*
TOTAL, excluding sugar cane and other industrial crops	*112.1*	*136.5*	*168.1*	*117.4*	*127.7*	*140.6*

Notes: Calculated on the basis of figures for physical output in 1957–62 and stocks for 1962–63. Prices for November 1961. Data on volume and prices provided by JUCEPLAN. In 1963 the index figures for the totals also reflect the estimated increase in the production of fruit, a category not included in earlier years because complete series were not available.

The composition of imports of capital goods also underwent significant changes. Purchases of building materials rose rapidly (from 35.4 million dollars to 73.8 million dollars) in 1957–61, partly because of the programme for the construction of hospitals, schools and housing, and then fell by 20 million dollars in 1962 when the emphasis was shifted to the expansion and finishing of directly productive installations.

The evolution of imports of capital goods for agriculture was similar: imports fell in 1962, as a consequence of the heavy imports of agricultural machinery in earlier years. The extensive imports of transport equipment, which tripled within four years, were due mainly to the need for the replacement or expansion of existing equipment, which had been depreciating sharply because of the shortage of accessories and spare parts.

With regard to imports of capital goods for industry the situation is rather more complex. The figures available show a sharp reduction between the average levels for 1957–61 and those for 1960–62, a development in apparent contradiction with the fact that in the second period a large number of industrial projects were initiated.[27]

However, a careful study of the statistical data reveals certain substantial items that are not strictly speaking industrial machinery or equipment, and whose imports were drastically reduced. This category includes such items as office equipment, electrical appliances and accessories (mainly for household use), sewing machines, and non-industrial appliances and machinery, which together involved purchases of about 85 million dollars between 1957 and 1958.

Despite the policy of restricting non-essential imports, which remained at a level whose total value was less than in 1957 and 1958, there was a continuing balance-of-payments deficit (see table 272). Moreover, it seems unlikely that at present any further foreign exchange savings can be achieved in purchases of consumer goods, and the programmes for the expansion of production capacity will not lead to an immediate net import substitution on any considerable scale. Consequently it can be concluded that until the sugar sector recovers from its depressed state the external imbalance is likely to continue.

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[27] Apart from other imports, in 1961 and 1962 alone purchases of about sixty complete industrial plants, representing an approximate value of over 80 million dollars, were made in western Europe and the centrally planned economies.

Although no data were available on other items on current account, it can be assumed that their magnitude is not such as to have any substantial effect on the results of merchandise transactions (c.i.f.), since both tourism and investment income have been declining. According to the data available, the financing of the deficits on external transactions in 1959–63, in the amount of about 400 million dollars, was achieved mainly by contracting with the centrally planned economies a long-term loan consolidating the cumulative deficit. Those countries also granted Cuba a loan of 300 million dollars for the purchase of machinery and other capital goods.[28]

3. AGRICULTURE

(a) *General behaviour of the agricultural sector*

After a period of fairly rapid growth between 1957 and 1960,[29] agricultural production as a whole decreased in absolute terms in the following three-year period, mainly because of the sharp decline in sugar-cane production. Whereas non-sugar production increased by 2.9 per cent a year (and within this category crops of food for domestic consumption rose by 9.4 per cent), and livestock production rose by 2.3 per cent, forestry production by 6.2 per cent and fishery production by 16.7 per cent, sugar-cane production decreased at a rate of over 16 per cent a year, which led to an average decline of 3.3 per cent for the agricultural sector as a whole between 1961 and 1963 (see tables 273 and 274).

Table 274. Cuba: Agricultural product

(*Millions of pesos*)

Product	*1961*	*1962*	*1963*	*Annual growth rates*		
				1961–62	*1962–63*	*1961–63*
Sugar-cane production .	264.5	204.8	186.2	−22.6	−9.1	−16.1
Production of other crops	247.3	266.4	261.9	7.7	−1.7	2.9
Livestock production .	178.1	175.9	186.4	−1.2	6.0	2.3
Forestry production .	29.0	38.3	32.7	32.1	−14.6	6.2
Fishery production . .	11.6	15.4	15.8	32.8	2.6	16.7
TOTAL	*730.5*	*700.8*	*683.0*	*−4.1*	*−6.5*	*−5.3*

SOURCES: 1961, JUCEPLAN; 1962 and 1963, ECLA estimates based on preliminary data for gross values of production and stocks provided by JUCEPLAN.

In addition to the incidence of the factors that are examined below, the behaviour of the agricultural sector in recent years has been influenced by highly adverse natural phenomena, such as the unprecedented drought (in terms both of duration and severity) that affected the 1961 and 1962 crops, and the destruction caused by the 1963 hurricane.[30]

In the State-owned sector of agriculture two overriding needs are felt: (*a*) the establishment of efficient agricultural enterprises, and (*b*) the formulation and execution of economic policy directives. When the first land reform was carried out, the general policy laid down was diversification of agricultural crops, to provide a national basis for the supply of food which, moreover, would lead to an extensive process of import substitution. Other policies related to the maintenance and expansion of production and of the crop area during the period when rural land was being redistributed.

As a result of this policy some progress was made in diversifying production, especially as regards beans, potatoes, tomatoes, cotton and *kenaf*, and the production of pork and poultry meats, while the *per capita* consumption levels of cereals, vegetables and tubers were maintained or increased. Similarly, it was possible to effect an appreciable increase in the area of land suitable for crop production through the clearance of about 400,000 hectares, although not all this area represents a net increase in the area under cultivation, because of the shortage of machinery to plough up the ground.

Furthermore, there was an increase in the flow of investment funds and inputs to encourage the expansion of agricultural production and improve its basic operating conditions. Not only did crop and stock production receive the largest share of annual investment in all sectors, but this share increased substantially between 1961 and 1963.[31] The tractor inventory, estimated in 1960 at 9,211 tractors of all types,[32] expanded considerably in 1961 and 1962, when about 10,000 additional tractors were imported. However, it should be noted that a significant proportion of the inventory is used very little or not at all, because of the shortage of spare parts. Agricultural investment has been extended to cover the clearing and conditioning of land referred to above, as well as the expansion of transport media, storage and other facilities, livestock herds, plantations, forestry development, etc. As regards inputs, the supply, despite temporary shortages and interruptions, has followed a rising trend, which has been reflected, for example, in appreciable increases in imports and domestic production of fertilizers and pesticides (see tables 276 and 277).

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[28] See Ministry of Foreign Trade, *La experiencia de Cuba en comercio exterior, 1958–1962*.

[29] No data on the livestock, forestry and fishery sectors were available for these years, but the quantum of crop production, excluding sugar cane, rose by about 45 per cent in this period. (See table 273.)

[30] The damage to agricultural production in the province of Camagüey and Oriente by hurricane "Flora" at the end of 1963 has been estimated by JUCEPLAN as the following percentages, which refer to the respective totals for the two provinces together: sugar-cane area 10 per cent; rice, fruit and cereals 60 per cent; cotton, coffee and cacao 70 per cent, and maize and tubers 80 per cent. In terms of the livestock population the estimates are 40 per cent for cattle and pigs and 70 per cent for poultry. These figures should still be regarded as provisional.

[31] See table 275 as regards imports, and section 6 below.

[32] See Jacques Chonchol, *La reforma agraria cubana: realizaciones y perspectivas* (Havana, 1961; mimeographed).

Table 275. Cuba: Imports of fixed capital goods for agriculture
(*Millions of pesos c.i.f.*)

Goods	*1957*	*1960*	*1961*	*1962*	*1963*[a]
Tractors	5.8	8.2	17.0	11.9	10.4
Other	16.3	15.4	15.1	6.1	...
TOTAL	22.1	23.6	32.1	18.0	...

SOURCE: Ministry of Foreign Trade.
[a] January–September.

Table 276. Cuba: Production of fertilizers, insecticides and herbicides
(*Thousands of tons*)

	1957	*1960*	*1961*	*1962*	*1963*
Fertilizer mixtures	265.6	300.0	405.3	519.1	422.0
Fertilizer compounds	...	...	0.6	4.4	17.0
Superphosphates	...	...	29.3	48.6	51.9
Insecticides and/or fungicides	...	...	1.4	4.8	2.8
Herbicides	...	...	0.2	0.3	1.4

SOURCE: JUCEPLAN.

Table 277. Cuba: Imports of fertilizers
(*Thousands of tons*)

	1957	*1960*	*1961*	*1962*	*1963*[a]
Potassium chloride	21.8	65.5	17.5	46.6	28.8
Ammonium nitrate	0.2	1.0	48.4	52.6	15.6
Ammonium sulphate	58.4	122.3	66.1	207.1	149.7
Superphosphates	54.6	113.4	113.4	134.5	60.2
Triple superphosphates		32.2	9.4	31.5	4.5
Potassium sulphate	23.6	7.9	12.8	12.1	8.9
All fertilizers (millions of pesos)	7.5	19.3	11.7	23.3	...

SOURCES: 1957–61, foreign trade yearbooks; 1962–63, Ministry of Foreign Trade.
[a] January–September.

The initial weakness in the organization of the State-owned sector of agriculture included certain difficulties in applying the policy of crop diversification, and this affected production growth rates. In many cases the principle of diversification was applied without any prior attempt to determine the zones or areas where the new crops were to be sown, with the result that every agricultural enterprise tried to produce a large range of items, so that the available land was sometimes subdivided and diversified to an excessive degree. At the same time new crops were introduced at a speed and on a scale that was not fully in accord with the knowledge and experience of the agricultural workers.

The sugar-cane crop seems to have suffered most from this process. In the first place, between 130,000 and 200,000 hectares were transferred from sugar cane to other crops between 1960 and 1961, and this applied to high-production areas and even areas close to the processing centres. Secondly, after 1961 manpower shortages began to be felt as a limiting factor in the cutting and harvesting of cane crops, and came to represent one of the basic obstacles to the expansion of sugar production. This relative shortage of manpower is due to a number of factors. One is the existence of different wage levels, in conjunction with the rate of expansion of employment in other sectors, especially construction and manufacturing, which led to a diversion of manpower to better paid and less exhausting work. Secondly, the introduction of new crops and the expansion of the area dedicated to them, and the declining yields in many agricultural activities (see table 278), set in motion a manpower-absorption process whose effects it has not thus far been possible to offset by programmes of mechanization of sugar production.

The private sector of agriculture, made up of owners of over 67.1 hectares (5 *caballerías*), which accounted for a considerable proportion (30 per cent) of arable land and, in particular, of livestock farms, participated passively in the agricultural development programmes, up to the time of its nationalization in 1963. There were a variety of reasons for this, which led in practice to under-utilization and reduction of productive capacity in this sector of agriculture.

Table 278. Cuba: Agricultural yields

(*Tons per hectare*)

Crop	*1945*	*1958*	*1959*	*1960*	*1961*	*1962*
Maize	0.92	0.88	1.10	1.13	0.86	0.88
Millet	1.10	1.20	1.26	1.32	1.37	1.09
Beans	0.60	0.62	0.63	0.44	0.51	0.53
Potatoes	6.77	9.47	9.89	11.09	8.58	8.71
Boniato	3.06	3.07	3.29	3.92	4.50	4.30
Ñame	3.32	3.31	3.46	3.94	4.17	5.30
Malanga	2.79	7.02	7.16	7.30	3.50	4.10
Yucca	3.22	3.70	3.84	3.85	5.15	6.80
Groundnuts	0.95	0.94	1.01	1.05	0.94	0.91
Soya beans	—	0.96	1.01	1.10	0.61	0.66
Tomatoes	13.00	20.60	21.10	21.70	13.65	12.90
Garlic	1.40	6.72	6.72	6.92	3.31	1.00
Onions	2.40	5.28	5.52	5.83	4.50	4.00
Cotton	—	1.23	1.20	1.20	0.78	0.55
Coffee	0.36	0.36	0.58	0.38	0.31	0.38
Citrus fruits	3.74	5.24	5.24	5.48	7.00	6.80
Rice	1.17	1.88	1.99	1.92	1.42	1.40

SOURCE: JUCEPLAN.

Table 279. Cuba: Sugar sector statistics

	Unit	*1955*	*1956*	*1957*	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*
Cane cut	Thousands of hectares	834.8	996.0	1,264.8	1,047.1	1,068.2	1,155.5	1,260.8	1,132.3	1,073.6
Cane ground	Millions of tons	34.8	37.0	44.7	45.7	48.0	47.5	54.3	36.7	31.4
Sugar-cane yield	Tons per hectare	4.2	3.8	3.6	4.4	4.5	4.2	4.4	3.3	2.9
Sugar output	Millions of tons	4.5	4.7	5.7	5.8	6.0	5.9	6.8	4.8	3.8
Sugar yield	Tons of sugar per 100 tons of cane	13.0	12.8	12.7	12.6	12.4	12.3	12.5	13.1	12.2

SOURCE: 1955–61, *Anuario Azucarero de Cuba*, 1961; 1962–63, JUCEPLAN.

(b) *Agricultural production*

(i) *Crops for industry and for export*

In 1961 output of sugar cane amounted to 48 million tons, a level inferior only to the bumper crop of 1952. This was largely the consequence of a policy aimed at expanding the area harvested, by using the sugar cane that had not been harvested in earlier years because of production controls (see table 279). In the two following years output fell, to reach a record low level of 31.4 million tons in 1963, a drop of over 35 per cent compared with 1961 and 33 per cent compared with the average for 1958–59.

Despite the problems arising from the reorientation of foreign trade and the shortage of light tobacco to supply the new structure of external demand and domestic consumption, the output of tobacco, based essentially on the domestic market,[33] slightly exceeded the figures for 1958, reaching a level of over 50,000 tons a year during the last three years (see again table 260).

As regards coffee, in 1959 output was 50 per cent higher than in 1957 (see table 260) because of a return to normal in production after the termination of hostilities (which had been centred in the main production area) and in response to certain incentives provided in earlier years by the Government's policy of encouraging coffee production. In the years after 1959 there were no new plantings, and manpower shortages arose that have tended to keep output down to the same level and have resulted in the absence of exportable surpluses. The problem was aggravated in 1963 when hurricane "Flora" damaged over 50 per cent of the crop.

Production of fibres—cotton, henequen and *kenaf* (see table 260) and oilseeds was strongly stimulated in 1960 and 1961 by the diversification and import substitution policies pursued during that period. More solid progress was achieved for *kenaf* and cotton, and there are good prospects that domestic production can increase its contribution to the supply of the textile industry. However, the output of some of these crops has recently tended to decline partly because efforts have been concentrated on higher-yield crops, and also, in some measure, because of technical shortcomings and the shortage of skilled manpower.

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[33] Preliminary estimates indicate that domestic consumption of twist rose by 28 per cent between 1959 and 1962, from 521 million to 640 million units.

(ii) *Agricultural products for domestic consumption*

Agricultural production of food for domestic consumption has increased at an annual rate of 5.8 per cent which, after correction for population growth, gives an annual *per capita* increase of 3.8 per cent between 1957 and 1963. This is the most dynamic part of the agriculture sector, in terms both of the average rate of expansion, and of the rapid recovery that took place after the general decline in 1961. The most important advances in this field are attributable to the increase or recovery of the crops of beans, tubers, *viandas* (yams of various types) and certain vegetables.

After a period of intensive expansion that led to a virtual doubling of output between 1957 and 1960, the volume of rice harvested fell sharply in 1961, and thus far it has not recovered to the peak level previously attained, despite the increases in output in 1962 and 1963. In fact rice output cannot be expected to increase significantly, because of the reduction in the area under rice envisaged for 1964 and future years, unless an increase in average productivity levels can be achieved. Output of maize followed an erratic course, with sharp fluctuations and a generally declining trend. Thus the 1963 crop was about 30 per cent lower than that for 1957, when the peak was reached.

Table 280. Cuba: Beef cattle population and slaughterings, and population of pigs, sheep and goats

(*Million head*)

Year	*Beef cattle*		*Population*	
	Population	*Slaughterings*	*Pig*	*Sheep and goat*
1946	4.12	...	1.34	0.29
1952	4.03	...	1.29	0.36
1957	...	0.81	...	...
1959	...	0.95	...	...
1960	...	1.10	...	...
1961	5.78	1.00	0.83	...
1962	5.80	0.75	1.42	...
1963	...	0.75	1.66	0.25

SOURCE: JUCEPLAN.

(iii) *Livestock and fish products*

Output of meat, especially beef, was seriously affected by the excessive slaughtering between 1959 and 1961, a development closely associated with the growth in the population's purchasing power, and also with the lack of incentives, and other factors that determined the pace of activity and investment in the private livestock sector, which up to 1962 accounted for over 70 per cent of the livestock population.

The high rate of slaughtering of beef cattle between 1959 and 1961 made it impossible to return to the levels of meat production prevailing prior to 1959, despite the measures adopted to protect and increase the livestock population (see table 280). For example, in 1960–61 about 13,000 breeding stock were imported, representing a value of over 4 million dollars. Output of pork, poultry and fish partly made up the deficit in the supply of beef.

The rearing and marketing of pigs was actively encouraged; a number of breeding centres were established and a considerable quantity of breeding stock imported. Between 1960 and 1961 about 40,000 head were purchased abroad. The effects of the programme began to be felt in the second half of 1963, once certain problems had been overcome relating to the organization of production and the expansion of available facilities.

The situation was similar in the poultry sector. After the decline caused in 1960 by the reduction of imports of poultry and eggs for breeding from the United States, there was a gradual increase in levels of activity. In 1963 government supplies of poultry and eggs for the population—excluding consumption on the farm and other major uses, such as supplies for student cafeterias—rose by 35 per cent and 10 per cent respectively, and amounted to 3 million birds and 15 million eggs per month.

Table 281. Cuba: Fishery production

Year	*Volume (millions of tons)*	*Value (millions of pesos)*
1957	22.0	...
1960	30.1	11.1
1961	30.6	11.3
1962	33.3	12.3

SOURCES: 1957, United Nations, *Statistical Yearbook, 1962*; 1960–62, JUCEPLAN.

One of the main factors limiting the development of livestock and poultry production is the shortage of dry feed and forage, and the low level of utilization of agricultural by-products for animal feeding. In the interval before programmes to encourage production of dry feed, hay and silage could bear fruit, the deficit in the domestic supply was made up by extensive imports. In 1963, for example, such imports represented an allocation of about 25 million dollars, which accounted for about 30 per cent of all external purchases of agricultural products.

The fishing industry was strongly stimulated by the government programmes to diversify production and increase the supply of food for domestic consumption. The fishing fleet has been considerably expanded in recent years. Between 1962 and 1963 about fifteen vessels with a capacity of 11 tons per trip were put into service (it is hoped to increase this number to 60 within the next two years), as well as a fleet of tunny fishing vessels. In 1961 fish production rose to 30,000 tons, and in 1962 to about 33,000 tons; about 3,400 tons a year underwent industrial processing (canning and freezing) (see table 281).

4. INDUSTRY

(a) *General behaviour of the sector*

In 1959 and part of 1960 manufacturing activity was stimulated by the growth of demand which was brought about, on the one hand, by the income redistribution policy adopted and, on the other, by the removal of the obstacles to production and trade that had arisen during the preceding period of armed conflict.

The impact of these factors continued to be felt in the next few years, but within a framework of far more rapid change. In the first place, 1960–63 witnessed the rapid nationalization of industrial property referred to earlier in this chapter. Secondly, Cuba's industry—which is characterized by its weak inter-sectoral relationships and the fact that it imports a high proportion of its inputs, raw materials and spare parts—could not remain unaffected by the re-orientation and structural changes that were taking place in foreign trade; in fact, it was probably more seriously affected than other sectors of economic activity. In this respect, besides the shift in Cuba's traditional sources of supply, it became necessary to effect drastic changes in the machinery for controlling the purchase, storage, reserves and allocation of imported goods and of intermediate products manufactured in the country. This explains the disequilibria that arose between supply and demand in respect of

Table 282. Cuba: Industrial product

Branch	*Product (millions of pesos)*			*Annual growth rates (percentage)*		
	1961	*1962*	*1963*	*1961–62*	*1962–63*	*1961–63*
Mining	26.1	43.7	35.9	67.4	−17.8	6.7
Metallurgy and metal-transforming	62.4	64.4	68.1	3.2	5.7	4.5
Building materials	40.0	36.5	38.9	−8.7	6.6	−1.4
Petroleum and petroleum products	78.7	94.3	95.0	19.8	0.7	9.9
Chemicals	82.6	106.5	111.8	28.9	5.0	16.3
Textiles and leather products	119.2	126.5	146.8	6.1	16.0	11.0
Sugar	143.4	99.9	90.6	−30.3	−9.3	−20.0
Food	153.2	155.9	144.5	1.8	−7.3	−2.9
Beverages and tobacco	152.7	149.4	161.1	−2.2	7.8	2.7
Electric power	55.1	58.6	61.6	6.4	5.1	5.7
Other	40.8	66.7	68.1	63.5	2.1	29.0
TOTAL	*954.2*	*1,002.4*	*1,030.4*[a]	*5.1*	*2.8*	*3.9*
TOTAL, excluding sugar	*810.8*	*902.5*	*939.8*[a]	*11.3*	*4.1*	*7.7*

SOURCES: 1961, JUCEPLAN; 1962 and 1963, ECLA, mainly on the basis of preliminary data on gross values of production provided by JUCEPLAN.

[a] Includes 8.0 million pesos not classified elsewhere.

Table 283. Cuba: Structure of industrial production

(*Percentage of value added*)

	Total			*Total, excluding sugar*		
	1961	*1962*	*1963*	*1961*	*1962*	*1963*
Group I	*59.6*	*53.0*	*53.1*	*52.4*	*47.8*	*48.6*
Sugar	15.0	10.0	8.9			
Other foods	16.1	15.6	14.1	18.9	17.3	15.5
Beverages and tobacco	16.0	14.9	15.8	18.8	16.6	17.3
Textiles and leather products	12.5	12.6	14.4	14.7	14.0	15.8
Group II	*14.0*	*15.3*	*15.3*	*16.5*	*16.9*	*16.8*
Petroleum and petroleum products	8.2	9.4	9.3	9.7	10.4	10.2
Electric power	5.8	5.8	6.0	6.8	6.5	6.6
Group III	*26.4*	*31.7*	*31.6*	*31.1*	*35.2*	*34.6*
Mining	2.7	4.4	3.5	3.2	4.8	3.9
Metallurgy and metal-transforming	6.5	6.4	6.7	7.7	7.1	7.3
Building materials	4.2	3.6	3.8	4.9	4.0	4.2
Chemicals	8.7	10.6	10.9	10.2	11.8	12.0
Other	4.3	6.7	6.7	5.0	7.4	7.3
TOTAL	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

SOURCE: 1961, JUCEPLAN; 1962 and 1963, ECLA, mainly on the basis of preliminary data for the gross values of production provided by JUCEPLAN.

industrial products, which caused fluctuations in the production growth rates of intermediate consumer goods and, at times, the temporary closing down of certain plants.

Other equally important factors played a part in Cuba's industrial development. The early manufacturing development plans provided for investment on an unusually large scale, covering a broad range of activities. Thus the industrial development process was affected by a lengthening of the period over which such investment was allowed to mature and—more important still from the standpoint of short-term production growth rates—by a relative deterioration in the maintenance and modernization of existing plants. In spite of the fact that steps were taken to remedy these shortcomings, in 1963 the implementation of the industrial plan was still hampered by limitations or changes in respect of supplies and reserves of raw materials, especially for the food, chemical, textile, petroleum and sugar industries.

Table 284. Cuba: Structure of industrial production

(Percentage gross values of production)

	Total			*Total, excluding sugar*		
	1961	*1962*	*1963*	*1961*	*1962*	*1963*
Group I	*68.3*	*60.3*	*59.0*	*57.8*	*52.1*	*51.3*
Sugar	25.1	17.2	15.8			
Other foods	23.0	22.9	20.1	30.7	27.7	23.9
Beverages and tobacco	10.5	10.1	11.1	14.1	12.2	13.2
Textiles and leather products	9.7	10.1	12.0	13.0	12.2	14.2
Group II	*9.4*	*11.9*	*12.2*	*12.6*	*14.3*	*14.4*
Petroleum and petroleum products	6.3	8.6	8.7	8.4	10.4	10.3
Electric power	3.1	3.3	3.5	4.2	3.9	4.1
Group III	*22.2*	*27.8*	*28.8*	*29.7*	*33.5*	*34.2*
Mining	1.8	3.0	2.5	2.4	3.6	3.0
Metallurgy and metal-transforming	4.9	5.0	5.4	6.6	6.1	6.4
Building materials	4.0	3.6	3.9	5.4	4.3	4.6
Chemicals	6.7	8.5	9.0	8.9	10.2	10.7
Other	4.8	7.7	8.0	6.4	9.3	9.5
TOTAL	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

SOURCE: Data on gross values provided by JUCEPLAN.

It should be noted, too, that the shortage of skilled workers, at both the intermediate and higher levels, constituted a further bottleneck in the development of production and in the raising of productivity levels. The departure of a considerable number of technicians from Cuba and the greater needs deriving from the new organization of industrial production gave rise to problems which are not yet completely solved.

Nevertheless, industrial development in 1959–63 (excluding sugar) registered firmer and more sustained growth rates than the rest of Cuba's production activities other than trade, whose expansion was hindered by the rise in final consumer prices and in the profits of State-owned importing and exporting enterprises. The relatively favourable trend followed by industrial production and value added is due, in particular, to the marked improvement achieved in the way of fuller utilization of installed capacity[34] and, to a lesser degree, to the incorporation of new plants in the production process.

(b) *Production trends*

The volume of production generated by the industrial sector—including mining and electric power, but not sugar—increased by an annual average of 7.7 per cent between 1961 and 1963[35] (see table 258). Broadly speaking, the composition of both value added and gross production values registered little change and the partial data available would seem to indicate that the situation has not altered since 1959 (see tables 283 and 284).

Among the most dynamic industries are textiles and leather, chemicals, and metallurgy and metal-transforming. Despite certain problems encountered in regard to supplies and spare parts in the textile and leather industries, it was possible to carry on with programmes for the modernization of workshops and their organization in more efficient units, and to raise the level of utilization of existing plants, all of which had the effect of increasing the volume of production by 23 per cent between 1961 and 1963, and of maintaining the rising trend initiated in 1959.

During the last few years, in addition to the rapid expansion of activity in the manufacture of made-up clothing of knitted and plain fabrics, as also in the production of cotton yarn and other products, greater diversification has been achieved by stimulating the cultivation and processing of hard fibres for the manufacture of sacks and rope and the development of a wide variety of textile lines. Leather footwear and tanning were other sectors registering considerable increases in production.[36]

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[34] In 1959 the proportion of utilized capacity was estimated at not more—and often less—than 60 per cent in the following branches of industry: metallurgy and metal-transforming, certain chemical products, rubber, textiles, foods and beverages, and certain mining products.

[35] In 1963 the rate of growth slackened, dropping from the previous year's figure of 11.3 per cent to 4.1 per cent.

The chemical industry, too, was able to overcome certain obstacles created by input supply problems and plant reorganization, the sector as a whole registering fairly rapid growth rates. The items whose production followed the sharpest upward trend include products of the light chemical industries—paint, matches, plastics and pharmaceutical products—sulphuric acid and some types of fertilizers and fungicides.[37] Other items that can be added to the list are rubber goods—particularly tyres and rubber footwear—and paper and paperboard products.[38]

The metallurgical and metal-transforming industries expanded at an average rate of 4.5 per cent, and some branches received a powerful boost in the shape of programmes for increasing domestic supplies of parts, instruments and spares or replacements for industrial, agricultural and transport equipment, and also of metal building materials, and for expanding repair and maintenance services. Although substantial, this sector's growth rate remained below installed capacity, mainly for want of skilled manpower to operate the imported machinery and equipment. Another factor contributing to this state of affairs was the drop in the production of steel ingots in the last two years. It is hoped to overcome this problem once the expansion of the Havana plant is completed, as that will bring supplies up to 300,000 tons annually.

The petroleum industry is one of the most outstanding cases in which substantial production increases were achieved through the fuller utilization of existing facilities. The processing of crude and fuel oil doubled and tripled, respectively, between 1957 and 1963 (see again table 261). Approximately one sixth of that increment must be attributed to the expansion of the old refinery in Havana, carried out in 1958. Since then, production capacity has expanded on a relatively lesser scale, attention being focused on introducing changes in the refining processes in order to increase primary distilling, or on replacing depreciated equipment, as in the case of the new gas plant at Marianao, whose output is intended to compensate for reductions in the output of other plants. The decline in the growth rate of this industry in 1963 was due mainly to the difficulty of raising the already very high levels of utilization of existing plants and, in lesser measure, to the somewhat irregular supplies of raw materials from abroad.

The building materials industry followed much the same trend as petroleum. Cement production increased from 650,000 to 870,000 tons between 1957 and 1961, while the manufacture of tiles, sanitary porcelain tiles and other ceramic ware continued to expand steadily up to 1963. However, the tempo of building fell off after 1961 and since the level of cement production had nearly reached full utilization of existing capacity, the building industry levelled off in 1963. At present, a new cement plant is being erected at a cost of over 4 million pesos, and the one at Santiago de Cuba is being enlarged.

Table 285. Cuba: Installed capacity of electric power plants
(*Thousands of kW*)

	1959	*1963*
Public service . .	*545*	*566*
Cuban Electricity Company . .	510	...
Western network .	...	465
Eastern network .	...	68
Independent plants .	35	33
Private service . .	*387*	*410*
Industry, excluding sugar	76	100
Sugar industry . .	311	310
TOTAL	*939*[a]	*976*

SOURCE: JUCEPLAN.

[a] Includes 7 million kW not classified elsewhere.

Despite the fact that capacity in respect of several items was under-utilized, the rate of growth of the food industry was slower than that of the other manufactures reviewed, and even dropped sharply in 1963. In the first place, the industries connected with the processing of animal products were beset by difficulties deriving from the problems affecting the livestock sector. Secondly, the food canning industry suffered because of the irregular and scarce supplies of raw materials, both local and imported, and tin-plate containers. Lastly, the reduction in the crops of certain commodities, such as coffee, peanuts and soya, in 1963 caused a decline in the operations of the respective processing plants.

Beverages and tobacco had similar problems to face. In general, the production of cigarettes and cigars—mainly for domestic consumption—grew at a relatively satisfactory pace from 1962 onwards, although the quality deteriorated somewhat and efforts to improve it are still unsuccessful. On the other hand, the production of beer, alcoholic beverages and soft drinks was hampered by the slow rate of investment for equipment replacement and maintenance, and by the limited supplies of containers made of glass and other raw materials.[39]

The production of electric power rose at an average annual rate of 5.9 per cent between 1957 and 1963, if the plants supplying the sugar mills are excluded, and at a rate of 4.4 per cent if they are included (see tables 285, 286 and 287). The rise in the levels of electric power generated far exceeded the enlargement of installed capacity, which increased by only 1 per cent annually from 1959 to 1963. Consequently, the reserves of the main public utility systems dwindled, which made it necessary to introduce rationing during some periods of peak demand, or when breakdowns occurred in the generating plants. As in the case of production, the growth of consumption was affected by the slackening of the sugar industry's activities. In fact, the electricity input in that sector dropped by over 7 per cent annually between 1957 and 1963. By contrast, the consumption of the rest of the industrial sector grew at an average rate of 6.9 per cent, and that of other activities (including household consumption) by 5.3 per cent.

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[36] From 1961 to 1963, the production of cotton yarn rose from 12,300 to 14,200 tons; that of cotton fabrics dropped from 11,000 to 10,200 tons; that of cotton sacks went up from 6,000 to 13,700 tons, and that of spun and rayon fabrics, from 2,800 to 3,300 tons. In the last year of the period, the value of the finished production of made-up clothing of knitted and plain fabrics increased by 15 and 48 per cent, respectively, and that of special textile lines by 34 per cent. The production of footwear, which in 1960 was 3.4 million pairs, rose to 7.1 million in 1961 and to 11.8 million in 1963.

[37] For some of the products referred to here and later on, see again tables 261 and 276.

[38] The following are the items registering the fastest production growth rates between 1961 and 1963: paperboard, corrugated cardboard, Kraft paper and newsprint.

[39] The production of beer and malt liquor by State-owned enterprises fell by 36 and 28 per cent, respectively, between 1961 and 1963. The manufacture of soft drinks went up by 15 per cent, and that of alcoholic beverages almost doubled, but this really represented a recovery of the levels attained in previous years.

Table 286. Cuba: Production of electric power

(*Millions of kW/h*)

Year	*Total*	*Total (excluding sugar sector)*	*Public service*	*Private service*		
				Total	*Sugar industry*	*Other*
1957	2,358	1,983	1,644	714	375	339
1958	2,589	2,191	1,867	722	398	324
1959	2,806	2,414	2,073	733	392	341
1960	2,981	2,594	2,233	748	387	361
1961	3,030	2,595	2,225	805	435	370
1962	2,998	2,703	2,288	710	295	415
1963	3,057	2,805	2,370	687	252	435

SOURCE: JUCEPLAN.

Table 287. Cuba: Consumption of electric power

(*Millions of kW/h*)

Year	*Total*[a]	*Total (excluding sugar sector)*	*Industrial*			*Non-industrial*
			Total	*Sugar industry*	*Industry excluding sugar*	
1957	2,024	1,671	960	353	607	1,064
1958	2,216	1,842	1,022	374	648	1,194
1959	2,388	2,021	1,071	367	704	1,317
1960	...	...	...	...	...	...
1961	2,575	2,183	1,204	392	812	1,371
1962	2,522	2,256	1,135	266	869	1,387
1963	2,588	2,361	1,132	227	905	1,456

SOURCE: JUCEPLAN.

[a] Differs from the total produced because of losses and inputs at the generating plants.

The long-term programmes that have been initiated provide for the execution of a large number of projects which are designed to raise the generating capacity to some 630,000 kW by 1968, that is, 65 per cent over the present level. The shorter-term projects under way amount to over 120 million pesos and are aimed at increasing the installed capacity by 40,000 kW and consumption by 8 per cent during the course of 1964.

The years 1961–63 were a period of acute depression for the sugar industry. Its share in industrial production contracted by nearly 10 per cent in terms of gross value, and by 6 per cent in terms of value added, the volume of processed crude sugar shrinking from 6.7 to 3.8 million tons. The low levels of activity were, of course, mainly the result of the reduction in the sugar crops for the reasons explained above.

Estimates in respect of the Government's industrial development plan for 1964 envisage a growth of 12 per cent for the sector as a whole. Concurrently, different rates of growth have been estimated for the various branches of industry so as to take into account development conditions, the degree of maturity of specific projects on which a start has already been made, and new investment patterns. Thus, the most dynamic industries (with an annual growth rate of over 11 per cent) are chemicals, textiles and leather, sugar, beverages and tobacco, and mining; those registering medium growth rates (between 6 and 11 per cent) are metallurgy and metal-transforming, food products and electric power; and those registering a slow rate of growth (6 per cent or less) are petroleum and petroleum products, building materials, etc.

The 1964 development plan also gives high priority to capital formation in the manufacturing sector, which accounts for 28 per cent of the total, that is, more than the proportion allocated to any other group of activities. The distribution of investment in industry (see table 288) primarily favours the development of the metallurgical and metal-transforming industry and the electric power sector, which together absorb over 40 per cent. In both cases, the aim has been to remove two serious bottlenecks in the Cuban economy.[40] Next follow the industries producing typical consumer goods—foodstuffs, beverages, textiles and leather—which account for over 22 per cent of total investment, or 30 per cent if the sugar industry is included. The remaining industrial activities will absorb 24 per cent, over one third being earmarked for building materials.

Table 288. Cuba: Distribution of industrial investment: Plan for 1964[a]

Branch	*Percentage*
Mining	2.6
Metallurgy and metal-transforming	20.2
Building materials	8.5
Petroleum and petroleum products	2.2
Chemicals	4.0
Electric power	24.5
Food, beverages and tobacco	13.9
Sugar	8.7
Textiles and leather products	8.9
Other	6.5
TOTAL	100.0

SOURCE: JUCEPLAN, Investment Department.
[a] Preliminary figures.

5. THE DOMESTIC DISEQUILIBRIUM

The inflationary pressures which have been pressing on Cuba's economy spring mainly, in so far as demand is concerned, from the income distribution measures adopted, and from the increase in public expenditure on current and capital account.

As noted previously, the policy followed in respect of employment, wages and the expansion of social services, coupled with other structural reforms, resulted in the transfer of a sizable flow of income to the more numerous population sectors. Moreover, the growth of public expenditure was intended to offset the depressive trends of the external sector and—more important still—to finance the operation and expansion of numerous productive activities which are now in the hands of the State.

At the same time, additional budgetary outlays had to be made to subsidize the expansion of the public administration and the implementation of programmes for the improvement of social services and for investment in the directly productive sectors. Added to this were the subsidies intended to cover the deficits of some State enterprises and the substantial increment in national defence costs.

While it is difficult to estimate the net increase in public expenditure, since the income and expenditure budgets of State enterprises have been incorporated in the national budget, everything points to a considerable increment, which in 1961–63 was reflected in a cumulative deficit of some 800 million pesos, financed mainly by credit from the Banco Nacional.[41]

The above-mentioned factors had the effect of increasing the liquid resources in the hands of the population, which was reflected in the growing volume of currency in circulation. Thus, following the 1961 monetary reform, the value of the bills and coins in circulation rose from 630 million to 709 million pesos within the span of two years, while deposits and savings accounts went up from 465 million to 797 million pesos over the same period (see table 290).

Table 289. Cuba: Public expenditure budgeted
(*Millions of pesos*)

1959	389.6
1960	755.9
1961	1,329.6
1962	1,853.7
1963	2,093.5
1964	2,399.4[a]

SOURCE: ECLA, on the basis of official statistics.
[a] Preliminary.

Table 290. Cuba: Currency in circulation and savings bank accounts
(*Balances on 31 December in millions of pesos*)

Year	*Bank-notes and coins in circulation*	*Savings accounts*[a]
1959	520	371
1960	1,025	202
1961	630	465
1962	674	696
1963	709	797

SOURCE: JUCEPLAN.
[a] Demand deposits, fixed term deposits and special accounts consequent upon Act No. 1964 of 1961 on exchange of currency notes.

These same factors led not only to an expansion of consumer demand, but also to important changes in its structure. A large proportion of the income formerly set aside for the payment of rentals in respect of real estate (both urban and rural), or to pay for services whose rates had been reduced or which were now provided free by the State, is now spent on consumer goods, creating on the supply of this type of commodity pressures other than the mere increment in monetary income.

Under the circumstances, there would have had to be a far greater expansion of domestic supply, accompanied by changes in its structure, if real consumer demand is to be satisfied and the inflationary pressures removed. In practice, the insufficient diversification of production and the comparatively slower growth of agricultural and industrial production in relation to demand resulted in a supply shortage which had a varying impact on the different categories of consumer goods. At the same time, the disequilibrium in the balance of payments made it impossible to cover those shortages by means of additional purchases abroad.

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[40] In addition to the electric power generating plants and cement factories which are to begin operations in 1964, there are some 150 industrial projects, valued at more than 400 million pesos, of which half are expected to start production within two or three years.

[41] Evidence of this may also be found by comparing the approved budgets, which rose from 1,329 million to 2,399 million pesos between 1961 and 1964 (see table 289).

Rationing was adopted as the chief means of adjusting to the growth of monetary income and the slower expansion of domestic supply. Not only are most food products now subjected to this form of control, but also a great many other items, i.e., clothing and footwear, and some durable consumer goods. Prices, which up to the beginning of 1961 had remained relatively stable, have since begun to rise, particularly in 1963. That year, other measures were taken, including compulsory wage stabilization in the various branches of activity.

Table 291. Cuba: Sectoral distribution of investment

	Millions of pesos			Percentage		
	1961	*1962*	*1963*[a]	*1961*	*1962*	*1963*[a]
Sector of production	*252*	*320*	*400*	*51.5*	*59.9*	*70.4*
Agriculture	82	127	140	16.8	23.9	25.6
Industry	77	100	141	15.7	18.7	24.3
Construction	15	20	31	3.1	3.7	5.3
Transport	55	45	49	11.2	8.4	8.4
Communications	17	15	7	3.5	2.8	1.2
Trade	6	13	20	1.2	2.4	3.5
Other	—	—	12	—	—	2.1
Social services	*237*	*214*	*172*	*48.5*	*40.1*	*29.6*
Housing and community services	115	82	64	23.5	15.4	11.0
Education and culture	40	37	32	8.2	6.9	5.5
Health and welfare	12	10	12	2.5	1.9	2.1
Sport and recreation	5	4	4	1.0	0.7	0.7
Other	65	81	60	13.3	15.2	10.3
TOTAL	*489*	*534*	*581*	*100.0*	*100.0*	*100.0*

SOURCE: JUCEPLAN, Investment Department.

[a] Preliminary estimates.

Although the final solution of the disequilibrium in the domestic market depends upon the extent to which domestic production can be expanded, market price distortions and the accumulation of liquid resources in the hands of the population may impede the gradual abolition of rationing and cause some disruption in the adoption of financial incentives to improve productivity. These problems have been studied by the Government, together with the need to seek a closer relationship between the two existing price systems—one marked by relative stability (the market for intermediate goods), and the other by rising prices (the labour and consumer goods markets). Such a relationship would pave the way for establishing a system of financial autonomy—as has already been done in the foreign trade and agricultural production enterprises—aimed at bringing costs more closely into line with prices and the income of production units, and at fostering the growth of productivity.

6. THE INVESTMENT PROCESS

Capital formation maintained a high growth rate during the period 1959–63. In the last three years in particular it rose by over 19 per cent, from 489 million to 581 million pesos (see note in table 257 and table 291). Moreover, the investment coefficient remained constant at about 18 per cent of the total value added (see table 292). Actually, the coefficient must have risen by 1 to 2 per cent, if it is considered that the growth of the product is distorted by the rise in price levels—mainly in the trade sector—whereas the investment estimates were based on relatively steady prices.

After 1961 the emphasis in the distribution of capital resources was increasingly laid on directly productive activities, while the share of social investment dropped from 48.5 per cent of the total in that year to 29.6 per cent in 1963. Following the strong impetus given to the building of educational establishments and hospitals in 1959–61, the execution of industrial and agricultural development programmes called for a greater concentration of efforts to speed up work on the construction and installation of fresh production capacity.

Table 292. Cuba: Product and investment

Year	Product	Investment	Investment coefficient (percentage)
	Millions of pesos		
1961	2,732	489	17.9
1962	2,993	534	17.8
1963	3,244	581	17.9

SOURCE: ECLA, on the basis of JUCEPLAN data.

An examination of the investment structure shows clearly that the amount and proportion allocated to the agricultural and industrial sectors increased rapidly until they absorbed nearly 50 per cent of total capital resources and over 70 per cent of those earmarked for directly productive activities. A similar trend is observable in the building and trade sectors, which considerably increased their share in 1961–63 (see again table 291). The share of the transport and communications sectors, on the other hand, tended to decrease partly because marketing costs included in investment were reduced and partly because some of those services were operated by the manufacturing enterprises themselves, to which the corresponding investment was credited.

Capital formation in agriculture was largely aimed at promoting the production of domestic consumer goods. As regards industry, while such sectors as metallurgy and metal-transforming, building materials and electric power absorbed a major proportion of investment, a sizable share was also allocated to products of the light manufacturing industries—textiles, leather goods, foodstuffs and certain chemical products—for direct consumption by the population.

Table 293. Cuba: Structure of investment
(*Percentage*)

	1961	*1962*	*1963*
Machinery and equipment	23.7	29.2	40.1
Construction . . .	66.9	60.1	49.1
Other	9.4	10.7	10.8
TOTAL	100.0	100.0	100.0

SOURCE: JUCEPLAN, Investment Department.

As to the effect of the capital formation process on income levels, it should be noted that the intensification of investment efforts was not generally followed by correlative increases in the product generated within the normal time it took to install and put into operation the new production capacity. This situation—although influenced by circumstances—was also attributable to the frequent changes that took place and to the general process of adjusting the public administration and planning systems which set the tone for the period 1959–63. Not only were the initial investment programmes ambitious as regards the volume of resources which could be effectively channelled and utilized in the capital formation process, but at the same time the plans incorporated a widely varying range of projects in terms of number, characteristics, quantity of funds and geographical distribution.

Consequently, the implementation of investment plans fell short of the figures envisaged, fairly substantial resources being tied up in projects which were never finished or were not even started. Of the investment projects drawn up for incorporation in the 1964 plan, some 60 per cent related either to work in course of execution or which, for a number of reasons, was postponed from the previous year. Moreover, those same factors were responsible for the accumulation of an appreciable quantity of imported machinery and equipment, whose installation had to be deferred for want of domestic assembly and construction capacity.

The problems reviewed above caused significant changes to be made in investment policy and planning methods. The measures adopted since 1962 are aimed at removing the principal obstacles to investment and at increasing its over-all effectiveness.

A stricter system of priorities was established, emphasis being placed on the completion of projects in course of execution; new projects were confined to those essential to the achievement of first-priority targets and the elimination of serious bottlenecks. One such measure was to introduce the changes referred to in the sectoral allocation of capital resources, which not only favoured the industrial and agricultural sectors, but at the same time improved the balance—from the standpoint of achieving an increment in production—between the investment components represented by construction, on the one hand, and machinery and equipment, on the other. In fact, expenditure on the former was reduced from 67 to 49 per cent, whereas the machinery and equipment sector almost doubled its share, which rose from 23 to 40 per cent of the total (see table 293). As a result, imports of basic machinery and equipment went up from 95 million to 193 million pesos. Thus, their import coefficient increased from 25 to 35 per cent with respect to total investment between 1961 and 1963, while imports of construction materials declined in both relative and absolute terms.

Domestic production of machinery and equipment—consisting primarily of agricultural equipment and implements; simple machinery and instruments for industrial use, shipbuilding, electrical appliances; parts and components for the transport sector, and furniture-making equipment—also expanded quickly, thanks to the impetus given to such industries as metallurgy and metal-transforming, its value increasing from 20 million to 36 million pesos in 1961–63.

These factors, combined with the policy of purchasing complete plants to facilitate their installation and subsequent operation, could have the effect of improving the capital-output ratio and also of speeding up the capital formation process, a result which was beginning to be apparent in 1963. That year marked the attainment of a higher proportion of the investment plan targets than the preceding years.[42]

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[42] For example, the coefficient rose from 62 to nearly 75 per cent between 1962 and 1963.

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Printed in the United Kingdom
Price: $U.S.3.00
(or equivalent in other currencies)
19479—May 1965—5,600